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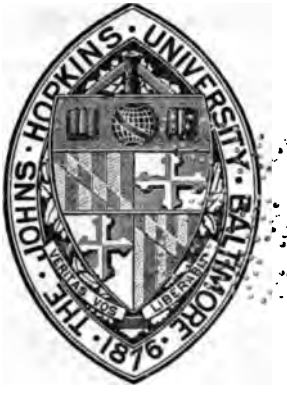

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A. B., Princeton College, 1849, and A. M., 1852; Ph. D., University of Göttingen, 1853; LL. D., College of William and Mary, 1869, and Harvard University, 1886; Professor of Greek in the University of Virginia, 1856-76; Professor of Latin in the University of Virginia, 1861-66; D. C. L., University of the South, 1884; Hon. Member of the Cambridge Philological Society, of the Philological Syllogos of Constantinople, and of the Archæological Society of Athens; *Editor of the American Journal of Philology.*

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Augustum Gymnasium, Görlitz, 1876; Ph. D., University of Leipsic, 1878; *Privat-docent* in the University of Göttingen, 1880, and Professor of Assyriology in the same, 1883; Honorary Curator of the collection of Oriental Antiquities in the U. S. National Museum, Washington, D. C.; *Coeditor of The Assyriological Library, and of Contributions to Assyriology and Comparative Semitic Philology; Editor of the Sacred Books of the Old Testament.*

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M. B., University of Toronto, 1893. Johns Hopkins Hospital.

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A. B., Johns Hopkins University, 1894, and Ph. D., 1895.

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Professor NATHANIEL S. SHALER, S. D., of Harvard University.
One lecture on *Volcanoes.*

BAILEY WILLIS, C. E., M. E., of the U. S. Geological Survey.
Twenty-five lectures on *Stratigraphic and Structural Geology.*

Botany.

BOLLING W. BARTON, M. D., of Baltimore.

JAMES E. HUMPHREY, D. Sc., of Massachusetts.

Romance Languages.

Professor FREDERICK M. WARREN, PH. D., of Adelbert College.
Forty lectures on *French Literature.*

Reader in Political Science.

WESTEL W. WILLOUGHBY, PH. D., of Washington, D. C.
Twenty-five lectures on the *Theory of the State.*

Experimental Psychology.

HERBERT NICHOLS, PH. D., of Massachusetts.

Additional Assistants for the Current Year.

The following names are those of students who render more or less service to the University in the departments named. In the enumeration, as in former years, such persons are not counted as members of the academic staff.

B. B. BRACKETT, A. M.—*Electricity.*
J. M. CALLAHAN, A. M.—*History.*
W. S. DAY, A. B.—*Physics.*
N. E. DORSEY, A. B.—*Physics.*
C. B. FURST, PH. B.—*Y. M. C. A.*
W. E. HENDERSON, A. B.—*Chemistry.*
D. S. JOHNSON, S. B.—*Botany.*
E. W. MAGRUDER, A. B.—*Chemistry.*
J. F. MOHLER, A. B.—*Astronomy.*
J. A. NESS, A. M.—*Sanskrit.*
C. C. O'HARRA, A. B.—*Geology.*
J. M. PAGE, PH. D.—*Mathematics.*
W. ROSENAU, A. B.—*Hebrew.*
A. C. SPENCER, S. B.—*Geology.*
H. P. THIEMÉ, A. B.—*French Literature.*
J. W. TUPPER, PH. D.—*Anglo-Saxon.*
H. S. UHLER, A. B.—*Physics.*
C. B. WILSON, A. M.—*Biology.*

GRADUATE STUDENTS.

FELLOWS BY COURTESY.

GEORGE MELVILLE BOLLING. Baltimore. 1019 *Linden Av.*

A. B., Loyola College, 1891; Fellow, Johns Hopkins University, 1893-94. *Greek, Latin, and Sanskrit.*

WILLIAM ALEXANDER ECKELS. Carlisle, Pa. 210 *McMechen St.*

A. B., Dickinson College, 1883, and A. M., 1886; late Professor in Ripon College. *Greek, Latin, and English.*

WILLIAM RITCHIE FRASER. Pictou, N. S. 1222 *Madison Av.*

A. B., Dalhousie University, 1882; Associate Professor, University of Nebraska, 1892-93. *Greek, Historical Jurisprudence, and Latin.*

WILLIAM FRANCIS GALLAWAY. Baltimore. 400 *N. Greene St.*

A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1896. *Greek, Latin, and Sanskrit.*

SAMUEL VERPLANCK HOFFMAN. New York City. 1009 *N. Calvert St.*

M. E., Stevens Institute of Technology, 1888; Fellow, Johns Hopkins University, 1893-94. *Astronomy, Physics, and Chemistry.*

DAVID HULL HOLMES. Baltimore. 2130 *Callow Av.*

A. B., Ohio Wesleyan University, 1885, and A. M., 1888; Fellow, Johns Hopkins University, 1892-93, and Ph. D., 1893; Associate Professor in the University of Kansas. *Greek.*

CHARLES WILLIAM LEVERETT JOHNSON. Baltimore. 32 *E. Preston St.*

A. B., Johns Hopkins University, 1891, and Fellow, 1893-94. *Greek, Latin, and Sanskrit.*

WALTER JONES. Baltimore. 1811 *Maryland Av.*

A. B., Johns Hopkins University, 1888, and Ph. D., 1891; late Professor in Purdue University. *Chemistry.*

GEORGE THEOPHILUS KEMP. Baltimore. 718 *N. Howard St.*

A. B., Johns Hopkins University, 1883, Fellow, 1885-86, and Ph D., 1886; M. D., Long Island Medical College, 1891. *Physiology.*

JOHN HOLLADAY LATANÉ. Baltimore. 1412 *Park Av.*

A. B., Johns Hopkins University, 1892, and Ph. D., 1895. *History.*

MAYNARD MAYO METCALF. Baltimore. 218 *E. Twenty-third St.*

A. B., Oberlin College, 1889; Fellow, Johns Hopkins University, 1892-93, Bruce Fellow and Ph. D., 1893; Associate Professor of Biology, Woman's College of Baltimore. *Biology.*

BARKER NEWHALL. Baltimore. 238 *W. Lanvale St.*

A. B., Haverford College, 1887, and A. M., 1890; Fellow, Johns Hopkins University, 1890-91, and Ph. D., 1891; late Instructor in Brown University. *Greek.*

JAMES MORRIS PAGE. Keswick, Va. 14 *E. Franklin St.*

A. M., Randolph Macon College, 1885; Ph. D., University of Leipsic, 1887; Adjunct Professor (*elect*), University of Virginia. *Mathematics.*

BRANTZ MAYER ROSZEL. Baltimore. 1118 *Bolton St.*

A. B., Johns Hopkins University, 1889, and Fellow, 1891-92. *Astronomy, Mathematics, and Physics.*

WILLIAM AUGUSTUS SMITH. Salem, Va. 112 *E. Monument St.*

A. B., Roanoke College, 1885, and A. M., 1890; Professor of Chemistry and Physics, Roanoke College. *Chemistry, Physics, and Mathematics.*

JAMES WADDELL TUPPER. Dartmouth, N. S. 1117 *Bolton St.*

A. B., Dalhousie University, 1891; Ph. D., Johns Hopkins University, 1895. *English.*

Adam T. Bruce Fellows.

Henry McElderry Knower. Baltimore. *The Albion.*
A. B., Johns Hopkins University, 1890, and Fellow, 1894-95. *Zoology, Physiology, and Botany.*

George Lefevre. Baltimore. 1225 *Linden Av.*
A. B., Johns Hopkins University, 1891, and Fellow, 1894-95. *Zoology, Physiology, and Botany.*

(2)

Fellows.

Norman Ross Carmichael. Strange, Ont. 2304 *McCulloh St.*
A. M., Queen's University (Ont.), 1890. *Physics and Mathematics.*

Arthur Douglas Chambers. Toronto, Ont. 247 *W. Preston St.*
A. B., University of Toronto, 1892. *Chemistry, Mineralogy, and Geology.*

Frank Hollinger Clutz. Atchison, Kan. 1504 *McCulloh St.*
A. B., Midland College, 1892. *Astronomy, Physics, and Mathematics.*

Franklin Story Conant. Wellesley Hills, Mass. 234 *W. Lanvale St.*
A. B., Williams College, 1893. *Zoology, Physiology, and Botany.*

Eneas Bernard Goodwin. Chicago, Ill. *St. Mary's Seminary.*
A. B., St. Mary's Seminary, 1892, and S. T. B., 1894. *Semitic Languages.*

William Jackson Humphreys. University of Virginia. 1524 *Park Av.*
A. B., Washington and Lee University, 1886, and C. E., 1888. *Physics, Chemistry, and Mathematics.*

Reid Hunt. Martinsville, O. 1019 *Linden Av.*
A. B., Johns Hopkins University, 1891, and Ph. D., 1896. *Physiology, Zoology, and Chemistry.*

Oliver Martin Johnston. Bastrop, La. 528 *W. Mulberry St.*
A. B., Mississippi College, 1890, and A. M., 1893. *Italian, French, and History.*

Gordon Jennings Laing. Toronto, Ont. 1104 *McCulloh St.*
A. B., University of Toronto, 1891. *Latin, Greek, and Roman Law.*

Caspar Levias. New York City.
A. B., Columbia College, 1893, Fellow, 1893-94, and A. M., 1894. *Semitic Languages. Resigned October, 1895.*

Louis Eugene Livingood. Reading, Pa. 700 *N. Broadway.*
A. B., Princeton College, 1890; M. D., University of Pennsylvania, 1895. *Pathology.*

Ebenezer Mackay. New Glasgow, N. S. 916 *McCulloh St.*
A. B., Dalhousie University, 1886. *Chemistry, Physics, and Mathematics.*

John McLaren McBryde, Jr. Blacksburg, Va. 1203 *Bolton St.*
A. B., University of South Carolina, 1890, and A. M., 1893. *English, German, and History.*

Henry Ludwell Moore. Baltimore. *Waverly.*
A. B., Randolph Macon College. *Economics, History, and Jurisprudence.*

Charles William Peppler. Baltimore. 2662 *Pennsylvania Av.*
A. B., Johns Hopkins University, 1892. *Greek, Latin, and Sanskrit.*

Franklin Lafayette Riley. Hebron, Miss. 1108 *N. Gilmor St.*
A. B., Mississippi College, 1889, and A. M., 1891. *History, Economics, and Jurisprudence.*

Frederick George Gottlob Schmidt. Baltimore. 1028 *Milton Place.*
University of Erlangen. *German, English, and Philosophy.*

John Adams Scott. Evanston, Ill. 1112 *Clendenin St.*
A. B., Northwestern University, 1891. *Greek, Latin, and Sanskrit.*

GEORGE OTIS SMITH. Skowhegan, Me. 924 *W. North Av.*
A. B., Colby University, 1893. *Geology, Palæontology, and Chemistry.*

M. VICTOR STALEY. Oshkosh, Wis. 411 *W. Hoffman St.*
A. B., University of Wisconsin, 1893, and A. M., 1894; Ph. D., Yale University, 1895. *Sanskrit.*

THOMAS HARDY TALIAFERRO. Baltimore. 1424 *Druid Hill Av.*
C. E., Virginia Military Institute, 1890. *Mathematics, Physics, and Astronomy.*

(21)

UNIVERSITY SCHOLARS.

GEORGE DOBBIN BROWN. Howard County. *St. Denis.*
A. B., Johns Hopkins University, 1895. *English.*

LAWRASON BROWN. Baltimore. 1517 *Bolton St.*
A. B., Johns Hopkins University, 1895. *Medicine.*

HUBERT LYMAN CLARK. Baltimore. 906 *McCulloh St.*
A. B., Amherst College, 1893. *Zoology, Physiology, and Botany.*

PELHAM EDGAR. Toronto, Ont. 1114 *McCulloh St.*
A. B., University of Toronto, 1892. *English, French, and German.*

ARTHUR SEWALL HAGGETT. New Castle, Me. 1307 *Linden Av.*
A. B., Bowdoin College, 1893, and A. M., 1894. *Greek, Latin, and Sanskrit.*

JAMES GRAHAM HARDY. Easton, Pa. 1504 *McCulloh St.*
A. B., Lafayette College, 1894. *Physics, Mathematics, and Chemistry.*

GEORGE OSCAR JAMES. Bowers Hill, Va. 906 *McCulloh St.*
A. B., Johns Hopkins University, 1895. *Mathematics.*

STUART SYMINGTON JANNEY. Baltimore. *The Shirley.*
A. B., Johns Hopkins University, 1895. *Romance Languages.*

FREDERICK ROBERTSON JONES. Baltimore. 229 *Falls Road.*
A. B., Western Maryland College, 1892, and A. M., 1895. *History, Economics, and Jurisprudence.*

REV. PAUL HENRY LAND. Baltimore. 611 *Aisquith St.*
A. B., Calvin College (O.), 1890. *Semitic Languages.*

OMERA FLOYD LONG. Millersburg, Ky. 1307 *Linden Av.*
A. B., Kentucky Wesleyan College, 1890, and A. M., 1893. *Latin, Greek, and Sanskrit.*

WILLIAM TYLER MATHER. Amherst, Mass. 1104 *McCulloh St.*
A. B., Amherst College, 1886, and A. M., 1891. *Physics, Chemistry, and Mathematics.*

GEORGE STEVENS MAYNARD. Washington, D. C. 917 *McCulloh St.*
A. B., Johns Hopkins University, 1894. *Electricity.*

JENS ANDERSON NESS. Red Wing, Minn. 907 *McCulloh St.*
A. B., Luther College, 1884, and A. M., 1890. *Sanskrit, Latin, and Greek.*

WILLIAM ALBERT NITZE. Baltimore. 1505 *Edmondson Av.*
A. B., Johns Hopkins University, 1894. *Romance Languages.*

EDWARD SPILLER OLIVER. Baltimore. 1725 *Bolton St.*
A. B., Johns Hopkins University, 1895. *Medicine.*

JACOB HALL PLEASANTS, JR. Baltimore. 606 *Cathedral St.*
A. B., Johns Hopkins University, 1895. *Medicine.*

MICHAEL DRUCK SOHON. Washington, D. C. *Washington.*
A. C., Lehigh University, 1890, and M. S., 1894. *Chemistry, Geology, and Physics.*

ARTHUR COE SPENCER. Cleveland, O. 2034 *Druid Hill Av.*
S. B., Case School of Applied Science, 1892. *Geology, Palaeontology, and Biology.*

CAMPBELL EASTER WATERS. Baltimore. 1433 *Bolton St.*
A. B., Johns Hopkins University, 1895. *Chemistry, Geology, and Physics.*

(20)

PHILOSOPHICAL STUDENTS.

CLEVELAND ABBE, JR. Washington, D. C. 1340 *Druid Hill Av.*
A. B., Harvard University, 1894. *Geology.*

FRANCIS LORENZO ABBOTT. Dillsborough, Ind. 829 *N. Howard St.*
S. B., De Pauw University, 1889. *Physics.*

JOHN CALVIN ADAIR. Tarkio, Mo. 1820 *Park Av.*
A. B., Westminster College (Pa.), 1886. *Chemistry.*

CHARLES ALBERTUS ADAMS. Arlington, Vt. 1033 *McCulloh St.*
S. B., Middlebury College, 1895. *History, Economics, and Politics.*

ADOLPH HALL AHRENS. Baltimore. 810 *Park Av.*
A. B., Johns Hopkins University, 1894. *English.*

GELLERT ALLEMAN. York, Pa. 1028 *McCulloh St.*
S. B., Pennsylvania College, 1893. *Chemistry, Mineralogy, and Physics.*

CHARLES RICKETSON ALLEN. New Bedford, Mass. 604 *N. Charles St.*
S. B., Mass. Institute of Technology, 1885. *Chemistry and Physics.*

WALTER HOLMES ALLMAN. Massillon, O. 1820 *Park Av.*
S. B., Ohio Wesleyan University, 1894, and Cornell University, 1895. *Chemistry.*

FRANK ANDREWS. Washington, D. C. 1015 *McCulloh St.*
A. B., Johns Hopkins University, 1893. *Economics, History, and Jurisprudence.*

HOWARD BELL ARBUCKLE. Lewisburg, W. Va. 1203 *McCulloh St.*
A. B., Hampden-Sidney College, 1889, and A. M., 1890. *Chemistry, Physiology, and Biology.*

EDWARD COOKE ARMSTRONG. Front Royal, Va. 1213 *John St.*
A. B., Randolph Macon College, 1890, and A. M., 1894. *Romance Languages.*

BENJAMIN WILLIAM ARNOLD, JR. Bedford City, Va. 909 *McCulloh St.*
A. B., Randolph Macon College, 1891. *Economics, Mathematics, and Philosophy.*

HENRY LEE ARNOLD. Corvallis, Ore. 853 *N. Eutaw St.*
S. B., Oregon Agricultural College, 1890. *English.*

HORACE HURLBUT ATKINS, JR. Denver, Colo. 1405 *Madison Av.*
E. M., Colorado School of Mines, 1894. *Electricity.*

HERBERT EVERERD BARR. New Wilmington, Pa. 1421 *McCulloh St.*
B. L., Westminster College, 1894. *Biology and Chemistry.*

MORRIS LINCOLN BARR. Monmouth, Ill. 616 *N. Carey St.*
A. B., Ohio Wesleyan University, 1890. *English, German, and History.*

JOHN WILLIAM BASORE. Broadway, Va. 1114 *Madison Av.*
A. B., Hampden-Sidney College, 1893. *Latin and Greek.*

ARTHUR HENRY BAXTER. Florence, Italy. 230 *W. Lanvale St.*
A. B., Johns Hopkins University, 1894. *Romance Languages.*

ERNEST JULIUS BECKER. Baltimore. 2131 *Maryland Av.*
A. B., Johns Hopkins University, 1894. *English, German, and French.*

FREDERICK HENRY BELL. Oxley, Ont. 1124 *Bolton St.*
A. B., University of Toronto, 1892. *English.*

EDWARD WILLIAM BERGER. Berea, O. 1214 *Patterson Av.*
A. B., German Wallace College, 1891; Ph. B., Baldwin University, 1894. *Biology and Chemistry.*

ARTHUR BIBBINS. Baltimore. 333 *N. Charles St.*
Ph. B., Albion College, 1887. *Geology.*

FERDINAND BONNOTTE. Baltimore. 29 *E. Mt. Vernon Place.*
Collège Louis-Le-Grand (Paris). *French, Italian, and History.*

JOSEPH HOCKMAN BOWMAN. Woodstock, Va. 310 *W. Hoffman St.*
A. B., Franklin and Marshall College, 1893. *Physics and Electricity.*

BYRON BRIGGS BRACKETT. Hannibal, N. Y. 916 *McCulloh St.*
A. B., Syracuse University, 1890, and A. M., 1893. *Physics, Electricity, and Mathematics.*

LYMAN JAMES BRIGGS. Lacey, Mich. 1028 *McCulloh St.*
S. B., Michigan Agricultural College, 1893; M. S., University of Michigan, 1895. *Physics, Mathematics, and Chemistry.*

HORACE WILLIAM BRITCHER. Syracuse, N. Y. 924 *Madison Av.*
B. C. E., Syracuse University, 1889. *Zoology, Physiology, and Botany.*

WILLIAM BROMWELL. Port Deposit. 1114 *Madison Av.*
A. B., Johns Hopkins University, 1888, and Ph. D., 1895. *Chemistry.*

CHARLES HILLMAN BROUGH. Ogden, Utah. 1219 *Druid Hill Av.*
A. B., Mississippi College, 1894. *History and Politics.*

GEORGE GRIFFIN BROWNELL. Syracuse, N. Y. 1024 *McCulloh St.*
A. B., Syracuse University, 1893. *Romance Languages.*

HERMANN BRÜLLE. Fredericksburg, Va. 629 *Light St.*
A. B. and S. B., Hampden-Sidney College, 1895. *Biology and Chemistry.*

REV. JOSEPH BRUNEAU. Baltimore. *St. Mary's Seminary.*
A. B., College of St. Godard (France), 1882; S. T. B., Seminary of Lyon, 1887; S. T. L., Catholic University of Paris, 1889. *Semitic Languages.*

ALFRED COOKMAN BRYAN. Rising Sun. 907 *McCulloh St.*
A. B., Johns Hopkins University, 1892. *Economics, History, and Social Science.*

CURTIS FIELD BURNAM, JR. Richmond, Ky. 1128 *McCulloh St.*
A. B., Central University, 1895. *Biology and Chemistry.*

PIERCE BUTLER. New Orleans, La. 621 *St. Paul St.*
A. B., Tulane University, 1892, and A. M., 1894. *English, French, and History.*

REV. WILLIAM CALDWELL. Baltimore. 301 *E. North Av.*
A. M., Southwestern Presbyterian University, 1888; Princeton Theological Seminary, 1891. *Semitic Languages.*

JAMES MORTON CALLAHAN. Mitchell, Ind. 110 *W. Twentieth St.*
A. B., Indiana University, 1894, and A. M., 1895. *History and Politics.*

THOMAS FITZ PATRICK CAMERON. Baltimore. 1008 *Cathedral St.*
A. B., Johns Hopkins University, 1894. *Romance Languages.*

KILLIS CAMPBELL. Enfield, Va. 1122 *McCulloh St.*
A. B. and B. L., University of Nashville, 1892; A. B., William and Mary College, 1894. *English, German, and French.*

CHARLES BENTON CANNADAY. Salem, Va. 1033 *McCulloh St.*
A. B., Roanoke College, 1892. *Latin, Greek, and Sanskrit.*

JAMES EDWIN CASSIDY. Woonsocket, R. I. *St. Mary's Seminary.*
A. B., St. Mary's Seminary, 1894, and A. M., 1895. *Biology.*

JOSEPH SCUDDER CHAMBERLAIN. Ames, Iowa. 909 *McCulloh St.*
S. B., Iowa Agricultural College, 1890, and M. S., 1892. *Chemistry.*

HARDEE CHAMBLISS. Hazen, Ala. 1028 *McCulloh St.*
Virginia Military Institute, 1894. *Chemistry, Geology, and Physics.*

JULIAN ALVIN CARROLL CHANDLER. Guiney's, Va. 1122 *McCulloh St.*
A. B., William and Mary College, 1891, and A. M., 1892. *History, English, and Jurisprudence.*

JAMES WILKERSON CHAPMAN, JR. Chestertown. 1011 *McCulloh St.*
A. B., Washington College, 1893. *Economics, History, and Social Science.*

WILLIAM ZACHARY CHILDS. Annapolis. 1016 *Madison Av.*
A. B., St. John's College, 1895. *Latin, Greek, and French.*

HARVEY JAMES CLEMENTS. Washington, Ind. 1003 *Hopkins Av.*
S. B., Moore's Hill College, 1888, and M. S., 1892; M. D., New Orleans University, 1892. *Biology and Geology.*

JOHN GEORGE CLINKSCALES. Clemson College, S. C.
A. B., Wofford College, 1876, and A. M., 1890; Professor of Mathematics, Clemson College. *Mathematics.*

GILBERT ABRAHAM COBLENS. Baltimore. 1520 *Linden Av.*
A. B., Johns Hopkins University, 1895. *Economics.*

CHARLES GILPIN COOK. Harford County. 238 *W. Lanvale St.*
S. B., Haverford College, 1892, and A. M., 1893. *Chemistry, Geology, and Physics.*

MATTHEW MAURY CORBIN. Comorn, Va. 851 *N. Howard St.*
Virginia Military Institute, 1894. *Electricity.*

FRED. CRANE. Montclair, N. J. 312 *W. Biddle St.*
A. B., Union College, 1893. *Chemistry and Biology.*

CHRISTOPHER CRIDLIN CRITTENDEN. Crewe, Va. 511 *N. Carey St.*
A. M., Richmond College, 1893. *English, German, and Philosophy.*

CHARLES WILLIAM REMSBERG CRUM. Baltimore. 1003 *Hopkins Av.*
A. B., Johns Hopkins University, 1884. *Mathematics.*

WILBUR FISK DALES. Washington, D. C. *Washington.*
A. B., Wesleyan University (Conn.), 1886, and A. M., 1889; Ph. D., Illinois Wesleyan University, 1891. *Greek, Sanskrit, and Latin.*

WAVERLEY BAYARD DANIEL. Garysburg, N. C. 1204 *McCulloh St.*
A. M., Wake Forest College, 1892. *Latin, Greek, and Roman Law.*

WILLIAM SCOFIELD DAY. New York City. 1115 *McCulloh St.*
A. B., Columbia College, 1884. *Physics, Mathematics, and Chemistry.*

JOHN DICKERMAN. Baltimore. 1124 *McCulloh St.*
A. B., Adelbert College, 1891. *Astronomy, Mathematics, and Physics.*

NOAH ERNEST DORSEY. Annapolis Junction. *Annapolis Junction.*
A. B., Johns Hopkins University, 1893. *Physics, Mathematics, and Chemistry.*

JOHN LEIGHTON DOUGLAS. Blackstock, S. C. 1307 *Linden Av.*
A. B., Davidson College, 1893. *Physics, Mathematics, and Chemistry.*

GILMAN ARTHUR DREW. Newton, Iowa. 502 *W. Lafayette Av.*
S. B., Iowa State University, 1890. *Zoology, Physiology, and Botany.*

ERNEST FERDINAND DU BRUL. Cincinnati, O. 700 *N. Arlington Av.*
B. L., Notre Dame University, 1892, A. B., 1893, M. L. and LL. B., 1894, and A. M., 1895. *Economics, History, and Politics.*

CHARLES RAYMOND DUVALL. Stephenson, Va. 1204 *McCulloh St.*
S. B., West Virginia University, 1891. *Mathematics, Physics, and Philosophy.*

ASBURY NEWTON EBAUGH. Baltimore. 2333 *N. Calvert St.*
Ph. B., Illinois Wesleyan University, 1889. *Astronomy, Mathematics, and Philosophy.*

JAMES REES EWING. Granville, O. 1217 *McCulloh St.*
A. B., Ohio Wesleyan University, 1890. *History, Politics, and Philosophy.*

JAMES MARION FARR. Union, S. C. 1307 *Linden Av.*
A. B., Davidson College, 1894, and A. M., 1895. *English, German, and French.*

JOHN FRANCIS FENLON. Chicago, Ill. *St. Mary's Seminary.*
A. B., St. Mary's Seminary, 1892, and A. M., 1893. *Semitic Languages.*

EDWIN LEIGH FINDLEY. Akron, O. 906 *McCulloh St.*
A. B., Buchtel College, 1891. *Greek, Latin, and Sanskrit.*

EDWIN MILLER FOGEL. Fogelsville, Pa. 1222 *Madison Av.*
A. B., Ursinus College, 1894. *Greek, Latin, and Hebrew.*

AUGUSTUS WHILDEN FOGLE. Orangeburg Co., S. C. 828 *Harlem Av.*
A. B., Newberry College, 1891, and A. M., 1894. *Latin and Greek.*

SAMUEL E. FORMAN. Baltimore. 1434 *McCulloh St.*
A. B., Dickinson College, 1887. *History, Jurisprudence, and Economics.*

HUGH MILLER FRAZER. Lexington, Ky. 1434 *McCulloh St.*
S. B., Kentucky State College, 1889. *Electricity.*

FRANK PRICE FREIN. Gt. Barrington, Mass. 520 *W. Mulberry St.*
A. B., Williams College, 1892. *Romance Languages.*

PIERRE JOSEPH FREIN. Gt. Barrington, Mass. 520 *W. Mulberry St.*
A. B., Williams College, 1892. *Romance Languages.*

DANIEL MANTON FRIERSON. Anderson, S. C. 1307 *Linden Av.*
A. B., Davidson College, 1890, and A. M., 1893. *Chemistry, Physics, and Mathematics.*

CLYDE BOWMAN FURST. Hagerstown. 1124 *McCulloh St.*
Ph. B., Dickinson College, 1893. *English and German.*

EDSON FESSENDEN GALLAUDET. Washington, D. C. 1219 *Bolton St.*
A. B., Yale University, 1893. *Physics, Electricity, and Mathematics.*

WILLIAM FRANCIS GILL. Henderson, N. C. 511 *N. Carey St.*
A. B., Trinity College (N. C.), 1894. *Latin, Greek, and Roman Law.*

KNUT GJERSET. Hagen, Minn. 705 *Hanover St.*
B. L. University of Minnesota, 1893. *English, German, and Sanskrit.*

IRVING MACKAY GLEN. Eugene, Ore. 1023 *McCulloh St.*
A. B., University of Oregon, 1894. *English, History, and German.*

CASWELL GRAVE. Monrovia, Ind. 1239 *Druid Hill Av.*
S. B., Earlham College, 1895. *Zoology.*

EDWIN LUTHER GREEN. Richmond, Va. 704 *N. Carey St.*
A. B., Washington and Lee University, 1892. *Greek, Latin, and Sanskrit.*

NATHANIEL EDWARD GRIFFIN. Baltimore. 1027 *N. Calvert St.*
A. B., Johns Hopkins University, 1894. *English, German, and Philosophy.*

REGINALD HARVEY GRIFFITH. Asheville, N. C. 1122 *McCulloh St.*
A. M., Furman University, 1892. *English, German, and French.*

REV. ADOLPH GUTTMACHER. Baltimore. 1833 *Linden Av.*
A. B., University of Cincinnati, 1887. *Semitic Languages.*

WILLIAM BONNELL HALL, JR. Sewanee, Tenn. 1024 *McCulloh St.*
A. M., University of the South, 1885; M. D., University of Virginia, 1890. *Biology.*

JAMES ROBERT HANKINS. Carthage, N. C. 309 *W. Hoffman St.*
A. B., Wake Forest College, 1890. *Mathematics and Physics.*

CALEB NOTBOHM HARRISON. Milwaukee, Wis. 914 *N. Fulton Av.*
B. C. E., University of Wisconsin, 1883. *Physics, Astronomy, and Mathematics.*

WILLIAM EDWARDS HENDERSON. Wooster, O. 837 *N. Eutaw St.*
A. B., University of Wooster, 1891. *Chemistry and Physics.*

CHARLES HOEING. Lexington, Ky. 1403 *Madison Av.*
A. B., Kentucky State College, 1890, and A. M., 1892. *Latin, Greek, and Sanskrit.*

CHARLES COLLIER HOLDEN. Raleigh, N. C. 347 *N. Charles St.*
A. B., Johns Hopkins University, 1888. *Romance Languages.*

FREDERICK STEARNS HOLLIS. Newton Highlands, Mass. 1213 *Bolton St.*
S. B., Massachusetts Institute of Technology, 1890. *Chemistry, Mineralogy, and Geology.*

JOSEPH HENRY HOWARD. Indianapolis, Ind. 234 *W. Lanvale St.*
A. B., Indiana University, 1888, and A. M., 1890. *Latin, German, and Sanskrit.*

VIRGIL LINN HUEY. Gibson City, Ill. 904 *Madison Av.*
A. B., Illinois Wesleyan University, 1892. *Latin, Greek, and Sanskrit.*

ROBERT JAMES HUGHES. Remsen, N. Y. 303 *W. Monument St.*
A. B., Hamilton College, 1890, and A. M., 1893. *Sanskrit.*

JULIAN HUGUENIN. Charleston, S. C. 1219 *Madison Av.*
A. B., Charleston College, 1895. *English, German, and French.*

CHARLES SHERMAN JEWELL. Ravenna, O. 2034 *Druid Hill Av.*
A. B., Allegheny College, 1891, and A. M., 1893. *Latin, Sanskrit, and Greek.*

DUNCAN STARR JOHNSON. Cromwell, Conn. 930 *Madison Av.*
S. B., Wesleyan University (Conn.), 1892. *Zoology, Botany, and Physiology.*

WILL HARRIS JOHNSON. Bloomington, Ill. 904 *Madison Av.*
A. B., Illinois Wesleyan University, 1893. *Latin, German, and French.*

EDWIN SHELDON JOHONNOTT, JR. Richmond, Ill. 828 *Harlem Av.*
S. B., Rose Polytechnic Institute, 1893. *Physics and Mathematics.*

THOMAS MADISON JONES. Doe Hill, Va. 1800 *Bolton St.*
A. B., Randolph Macon College, 1894. *Latin, Greek, and German.*

WILLIAM APP JONES. Hillsboro, N. C. 1204 *McCulloh St.*
A. B., Wake Forest College, 1893. *Chemistry, Geology, and Mineralogy.*

FRANKLIN HENRY KEAN. Louisville, Ky. 1120 *Linden Av.*
A. B., Central University (Ky.), 1891; B. D., Louisville Theological Seminary, 1894. *History, Hebrew, and Philosophy.*

EDWIN WEXLER KENNEDY. Durham, N. C. 1111 *Bolton St.*
A. B., University of Tennessee, 1880. *History, Jurisprudence, and Greek.*

BENJAMIN WESLEY KILGORE. Raleigh, N. C. 1403 *Madison Av.*
S. B., Mississippi Agricultural College, 1888, and M. S., 1892. *Chemistry.*

WILLIAM HEARD KILPATRICK. White Plains, Ga. 1031 *McCulloh St.*
A. B., Mercer University, 1891. *Mathematics, Astronomy, and Philosophy.*

STEPHEN HENRY KING. Providence, R. I. 1529 *Bolton St.*
M. D., Harvard University, 1872. *Chemistry and Physics.*

SAMUEL SHIPMAN KINGSBURY. Pittsburg, Pa. 1120 *McCulloh St.*
A. B., Marietta College, 1893. *Greek, Latin, and Sanskrit.*

GEORGE PHILIP KRAPP. Springfield, O. 914 *McCulloh St.*
A. B., Wittenberg College, 1894. *English, German, and French.*

ARTHUR LINCOLN LAMB. Baltimore. 1005 *McCulloh St.*
A. B., Johns Hopkins University, 1888. *Zoology, Physiology, and Chemistry.*

JOHN WILLIAM LAWSON. Urbana. 1416 *Linden Av.*
S. B., Maryland Agricultural College, 1893. *Chemistry and Physics.*

GUY CARLETON LEE. Chapel Hill, N. C. 1133 *Bolton St.*
LL. B., University of North Carolina, 1894; A. B. and LL. M., Dickinson College, 1895. *History and Politics.*

REV. CLIFTON HADY LEVY. Baltimore. 728 *Lennox St.*
A. B., University of Cincinnati, 1887; Hebrew Union College of Cincinnati, 1890. *Semitic Languages.*

ALVIN FAYETTE LEWIS. Bowling Green, Ky. 906 *McCulloh St.*
A. B., Princeton College, 1884, and A. M., 1887. *History, Economics, and Philosophy.*

SETH HANCE LINTHICUM. Wellham's. *Wellham's.*
S. B., St. John's College, 1895. *Chemistry, Mineralogy, and Geology.*

GEORGE BRIGGS LYNES. Middleburgh, N. Y. 312 *W. Biddle St.*
A. B., Union College, 1894. *History, Economics, and Roman Law.*

EGBERT WATSON MAGRUDER. Keswick, Va. 1203 *McCulloh St.*
A. B., Hampden-Sidney College, 1891. *Chemistry, Mineralogy, and Physics.*

FRANCIS MALLORY. Tappahannock, Va. 1424 *Druid Hill Av.*
C. E., Virginia Military Institute, 1889. *Physics, Mathematics, and Astronomy.*

WILLIAM MCCLAIN, JR. Delaware, O. 1424 *Druid Hill Av.*
A. B., Ohio Wesleyan University, 1893. *Mathematics, Physics, and Astronomy.*

RAPHAEL MONROE MCKENZIE. Rahway, N. J. 837 *N. Eutaw St.*
S. B., University of the City of New York, 1890, and M. S., 1892. *Chemistry, Physics, and Mathematics.*

THOMAS EMERY MCKINNEY. Marietta, O. 1007 *McCulloh St.*
A. B., Marietta College, 1887. *Mathematics.*

CHARLES ELWOOD MENDENHALL. Worcester, Mass. 1340 *Druid Hill Av.*
S. B., Rose Polytechnic Institute, 1894. *Physics, Mathematics, and Chemistry.*

JOSEPH FRANCIS MERRILL. Richmond, Utah. 315 *W. Hoffman St.*
S. B., University of Michigan, 1893. *Physics and Electricity.*

REV. WILLIAM HAMMOND MILTON. Baltimore. 825 *Hollins St.*
Virginia Military Institute, 1868; B. D., Virginia Theological Seminary, 1892. *History and Jurisprudence.*

SAMUEL ALFRED MITCHELL. Kingston, Ont. 1120 *McCulloh St.*
A. M., Queen's University (Ont.), 1894. *Mathematics, Physics, and Astronomy.*

JOHN FREDERICK MOHLER. Cumberland Co., Pa. 2416 *Druid Hill Av.*
A. B., Dickinson College, 1887. *Physics, Astronomy, and Mathematics.*

WALTER ALEXANDER MONTGOMERY, JR. Warrenton, N. C.
A. B., Johns Hopkins University, 1892. *Greek and Latin.* 309 *W. Hoffman St.*

JOHN STOKES MORRIS. Germantown, Pa. *The Arundel.*
S. B., Haverford College, 1891, and A. M., 1892. *Mathematics, Physics, and Philosophy.*

CHARLES PATRICK NEILL. Austin, Texas. 700 *N. Arlington Av.*
A. B., Georgetown College (D. C.), 1891; A. M., Notre Dame University, 1893. *Economics, Jurisprudence, and History.*

HARVEY NEWCOMER. Rohrerstown, Pa. 310 *W. Hoffman St.*
A. B., Franklin and Marshall College, 1892, and A. M., 1895. *Physics.*

ROBERT STEWART NORRIS. Baltimore. 1028 *McCulloh St.*
S. B., University of California, 1892. *Chemistry, Zoology, and Botany.*

PHILIP OGDEN. Portland, Me. 1340 *Druid Hill Av.*
A. B., Cornell University, 1891. *Romance Languages.*

CLEOPHAS CISNEY O'HARRA. Carthage, Ill. 1841 *W. Lexington St.*
A. B., Carthage College, 1891. *Geology and Biology.*

NATHAN ALLEN PATTILLO. Loachapoka, Ala. 1211 *Madison Av.*
S. B., Southern University, 1887, and A. M., 1890. *Mathematics and Physics.*

JESSE PAWLING, JR. Overbrook, Pa. 1122 *Druid Hill Av.*
A. B., Philadelphia High School, 1886, and A. M., 1893; S. B., Cornell University, 1893. *Physics, Mathematics, and Astronomy.*

ALEXANDER PELL. Brooklyn, N. Y. 1124 *Bolton St.*
St. Petersburg Artillery School. *Mathematics, Astronomy, and English Literature.*

DANIEL ALLEN PENICK. Austin, Texas. 1119 *Bolton St.*
A. B., University of Texas, 1891, and A. M., 1892. *Greek, Latin, and Sanskrit.*

THOMAS DOBBIN PENNIMAN. Baltimore. 922 *Cathedral St.*
A. B., Johns Hopkins University, 1892. *Physics, Electricity, and Mathematics.*

DAVID STERRETT PINDELL. Cockeysville. *Cockeysville.*
A. B., Johns Hopkins University, 1895. *Electricity.*

CORNELIUS WILLIAM PRETTYMAN. Winston, N. C. 1124 *McCulloh St.*
A. B., Dickinson College, 1891. *German, English, and French.*

CHARLES DABNEY RAGLAND. Hyco, Va. 909 *McCulloh St.*
A. B., Randolph Macon College, 1889, and A. M., 1890. *Chemistry, Geology, and Physics.*

ALBERT MOORE REESE. Baltimore. 1435 *Bolton St.*
A. B., Johns Hopkins University, 1892. *Zoology, Geology, and Botany.*

EBENEZER EMMET REID. Lynnhaven, Va. 1133 *Bolton St.*
A. M., Richmond College, 1892. *Chemistry, Physics, and Mathematics.*

JAMES WALKER REID. Pineville, N. C. 1112 *McCulloh St.*
A. B., Erskine College, 1891. *Mathematics, Physics, and Astronomy.*

MILTON REIZENSTEIN. Baltimore. 709 *Lennox St.*
A. B., Johns Hopkins University, 1894. *Economics, History, and Jurisprudence.*

EDWARD RHOADS. Germantown, Pa. 906 *McCulloh St.*
S. B., Haverford College, 1893. *Physics.*

ROY SPENCER RICHARDSON. Syracuse, N. Y. 1033 *McCulloh St.*
Ph. B., Syracuse University, 1894. *Zoology, Botany, and Physiology.*

REV. WILLIAM ROSENAU. Baltimore. 1618 *Druid Hill Av.*
A. B., University of Cincinnati, 1888; Hebrew Union College of Cincinnati, 1889. *Semitic Languages.*

JOHN JACOB ROTHERMEL. Lancaster, Pa. 1312 *Park Av.*
A. B., Franklin and Marshall College, 1893. *Physics, Electricity, and Mathematics.*

FRANK ROY RUTTER. Baltimore. 1406 *Myrtle Av.*
A. B., Johns Hopkins University, 1894. *Economics, Jurisprudence, and History.*

GARNETT RYLAND. Richmond, Va. 1133 *Bolton St.*
A. M., Richmond College, 1892. *Chemistry.*

WILLIAM BERNEY SAFFOLD. Selma, Ala. 1031 *McCulloh St.*
A. B., University of Alabama, 1887, LL. B., 1888, and A. M., 1889. *Latin, Greek, and Sanskrit.*

FREDERICK ALBERT SAUNDERS. Ottawa, Canada. 1115 *McCulloh St.*
A. B., University of Toronto, 1895. *Physics.*

CHARLES ALBERT SAVAGE. Baltimore. 306 *Herald Building.*
A. B., Johns Hopkins University, 1896. *Greek, Latin, and German.*

HERBERT ARMISTEAD SAYRE. Montgomery, Ala. 315 *W. Hoffman St.*
B.E., University of Alabama, 1893. *Mathematics, Astronomy, and Physics.*

REV. TOBIAS SCHANFARBER. Baltimore. 2013 *Madison Av.*
A. B., University of Cincinnati, 1885; Hebrew Union College of Cincinnati, 1886. *Semitic Languages.*

CHARLES CARROLL SCHENCK. Baltimore. 1007 *St. Paul St.*
A. B., Johns Hopkins University, 1893. *Physics, Mathematics, and Chemistry.*

OSCAR SCHMIEDEL. Baltimore. 935 *McCulloh St.*
S. B., Bethany College, 1886, and A. M., 1888. *Mathematics and Astronomy.*

GEORGE BURBANK SHATTUCK. Lowell, Mass. 918 *N. Calvert St.*
S. B., Amherst College, 1892. *Geology, Mineralogy, and Biology.*

PHILIP HENRY SHERIDAN. Washington, D. C. *St. Mary's Seminary.*
A. B., St. Mary's Seminary, 1893, and A. M., 1894. *Biology.*

JOHN CARLETON SHERMAN. Baltimore. 1209 *Madison Av.*
S. B., Mass. Institute of Technology, 1895. *Physics, Electricity, and Mathematics.*

DANIEL NAYLOR SHOEMAKER. Fair Haven, O. 1239 *Druid Hill Av.*
S. B., Earlham College, 1894. *Zoology and Botany.*

CHESTER DAVID MICHAEL SHOWALTER. Snowville, Va. 410 *Park Av.*
A. B., Milligan College, 1891. *Mathematics and Physics.*

ENOCH WALTER SIKES. Monroe, N. C. 1204 *McCulloh St.*
A. M., Wake Forest College, 1891. *History, Economics, and Jurisprudence.*

EDWARD SELL SMITH. Warren, O. 645 *N. Paca St.*
A. B., University of Michigan, 1892. *Chemistry and Biology.*

ERNEST ASHTON SMITH. Valdosta, Ga. 300 *Dolphin St.*
A. B., Ohio Wesleyan University, 1888, and A. M., 1891. *Economics.*

REV. CHARLES BYFIELD SPARKS. Louisville, Ky. 1516 *Eutaw Place.*
Virginia Theological Seminary, 1893. *Hebrew and Greek.*

FRANCIS EDGAR SPARKS. Corbett. *Corbett.*
A. B., Johns Hopkins University, 1893. *History, Economics, and Jurisprudence.*

SAMUEL PHAON STAUFFER. South Whitehall, Pa. 1222 *Madison Av.*
A. B., Ursinus College, 1889; Union Theological Seminary, N. Y., 1892. *Mathematics, Physics, and Astronomy.*

WILLIAM BULL STODDARD. Boulder, Colo. 1405 *Madison Av.*
S. B., University of Colorado, 1894. *Chemistry, Geology, and Physics.*

MERVIN TUBMAN SUDLER. Westover. 1016 *Madison Av.*
S. B., Maryland Agricultural College, 1894. *Zoology, Physiology, and Botany.*

JOHN WILLIAM SULLIVAN. San Francisco, Cal. *St. Mary's Seminary.*
A. B., St. Mary's Seminary, 1893, and A. M., 1894. *Biology.*

MORRIS CRATER SUTPHEN. Morristown, N. J. 703 *N. Howard St.*
A. B., Princeton University, 1890, and A. M., 1893. *Latin, Greek, and Sanskrit.*

HUGO PAUL THIEME. Fort Wayne, Ind. 1119 *Bolton St.*
A. B., Johns Hopkins University, 1893. *French, Spanish, and History.*

HORACE SCUDDER UHLER. Baltimore. 1120 *Linden Av.*
A. B., Johns Hopkins University, 1894. *Mathematics and Physics.*

JAMES BLAIR WALKER. Pittsburg, Pa. 932 *Madison Av.*
S. B., Pennsylvania State College, 1890. *Geology, Mineralogy, and Biology.*

JAMES MOWTON SAUNDERS WARING. Baltimore. 1919 *Eutaw Place.*
Virginia Military Institute, 1894. *Electricity.*

ROBERT FREDERICK WHITEHEAD. Lovingston, Va. 1225 *Druid Hill Av.*
Ph. B., University of Virginia, 1892, A. B. and A. M., 1893. *Mathematics and Physics.*

EDWARD LUCAS WHITE. Baltimore. 325 *E. North Av.*
A. B., Johns Hopkins University, 1888. *Latin and Greek.*

WILLIAM HENRY WILHELM. Baltimore. 1016 *Madison Av.*
A. B., and S. B., St. John's College, 1893. *Mathematics and Astronomy.*

CHARLES BRANCH WILSON. Waterville, Me. 7 *W. Twenty-fourth St.*
A. B., Colby University, 1881, and A. M., 1883. *Zoology, Physiology, and Chemistry.*

RICHARD HENRY WILSON. Hopkinsville, Ky. 1517 *W. Lafayette Av.*
A. B., Johns Hopkins University, 1892. *Romance Languages.*

WILLIAM PHILLIPS WINTER. New Berlin, Pa. 1003 *Hopkins Av.*
A. B., Ohio Wesleyan University, 1887, and A. M., 1890. *Biology, Mineralogy, and Geology.*

HERMAN WILLIAM FRANZ WOLLAEGER. Milwaukee, Wis.
Concordia College (Milwaukee), 1892; Concordia Seminary (St. Louis), 1895. *English, German, and French.* 1021 *McCulloh St.*
(184)

ATTENDANTS ON SINGLE COURSES OF LECTURES.

Geology.

JAMES A. MITCHELL. Emmittsburg. *Emmittsburg.*
A. M., Mt. St. Mary's College, 1888; Ph. D., Niagara University, 1894; Professor of Geology, Mt. St. Mary's College.

DAVID ELLSWORTH ROBERTS. Baltimore. 2120 *E. Baltimore St.*
A. B., Johns Hopkins University, 1888.

REV. ELMER EDWIN SCHANTZ. New Freedom, Pa. *New Freedom, Pa.*
A. B., Midland College, 1892.

Biology.

REV. ARSENIUS BOYER. Baltimore. *St. Mary's Seminary.*
Seminary of St. Sulpice (Paris), 1878.

German.

CHARLES FRANCIS WOODS, JR. Baltimore. 2315 *Maryland Av.*
A. B., Johns Hopkins University, 1891.

Greek.

TAZEWELL TAYLOR THOMAS. Mattapany. 1026 *N. Calvert St.*
A. B., St. John's College, 1894.

Romance Languages.

JOHN WORK GARRETT. Baltimore County. *Govanstown.*
S. B., Princeton University, 1895.

English.

SAMUEL NAPIER ROBERTSON. Cape Traverse, P. E. I. 1640 *E. Fayette St.*
A. B., Dalhousie University, 1892.

GEORGE SHIPLEY. Warrenton, Va. 1019 *Linden Av.*
A. B., Randolph Macon College, 1887, and A. M., 1888.

HENRY SKINNER WEST. Baltimore. 2419 *Maryland Av.*
A. B., Johns Hopkins University, 1893.

Mathematics.

STEPHEN CLOUD HARRY. Baltimore. 1221 *Druid Hill Av.*
A. B., Johns Hopkins University, 1894.
(11)

MEDICAL STUDENTS.

CANDIDATES FOR THE DEGREE OF M. D.

Third Year.

CHARLES RUSSELL BARDEEN. A. B., Harvard University, 1893.	Syracuse, N. Y.	412 *N. Broadway.*
THOMAS RICHARDSON BROWN. A. B., Johns Hopkins University, 1892.	Baltimore.	1033 *Cathedral St.*
CORNELIA CHAPEL CHURCH. A. B., Smith College, 1888.	Pasadena, Cal.	135 *Jackson Place.*
WALTER S. DAVIS. S. B., Amherst College, 1893.	Minneapolis, Minn.	935 *N. Calvert St.*
LESTER WIGGINS DAY. Ph. B., Yale University, 1893.	Baltimore.	47 *W. Mt. Royal Av.*
LOUIS PHILIP HAMBURGER. A. B., Johns Hopkins University, 1893.	Baltimore.	1501 *Eutaw Place.*
GUY LE ROY HUNNER. S. B., University of Wisconsin, 1893.	Madison, Wis.	132 *Jackson Place.*
IRVING PHILLIPS LYON. A. B., Yale University, 1893.	Hartford, Conn.	910 *N. Calvert St.*
WILLIAM GEORGE MACCALLUM. A. B., University of Toronto, 1894.	Dunnville, Ont.	225 *E. Biddle St.*
CHARLES NEIL MCBRYDE. S. B., University of South Carolina, 1891; M. S., Virginia Agricultural and Mechanical College, 1892.	Blacksburg, Va.	1203 *Bolton St.*
WILLIAM WATSON MCCULLOH. A. B., Johns Hopkins University, 1889.	Baltimore.	929 *McCulloh St.*
JAMES FARNANDIS MITCHELL. A. B., Johns Hopkins University, 1891.	Baltimore.	1013 *Cathedral St.*
JOSEPH LONGWORTH NICHOLS. A. B., Harvard University, 1893.	Cincinnati, O.	225 *E. Biddle St.*
EUGENE LINDSAY OPIE. A. B., Johns Hopkins University, 1893.	Baltimore.	219 *W. Monument St.*
MARY SECORD PACKARD. A. B., Vassar College, 1892; Harvard Summer School, 1893.	Bayonne, N. J.	812 *St. Paul St.*
OMAR BORTON PANCOAST. S. B., Swarthmore College, 1893.	Woodstown, N. J.	132 *Jackson Place.*
CLEMENT ANDARIESE PENROSE. A. B., Johns Hopkins University, 1893.	Baltimore.	1318 *N. Charles St.*
RICHARD PEARSON STRONG. Ph. B., Yale University, 1893.	Baltimore.	*Fort McHenry.*

Second Year.

WILLIAM STEVENSON BAER. Baltimore. 24 *N. Broadway.*
A. B., Johns Hopkins University, 1894.

THOMAS PUMPHREY BENSON. Wellham's X Roads. *Wellham's X Roads.*
A. B., Johns Hopkins University, 1894.

WILLIAM JEPHTHA CALVERT. Lexington, Ky. *The Albany.*
A. B., University of Kentucky, 1893; Graduate Student, Kentucky State College, 1893-94.

PATRICK JOSEPH CASSIDY. Norwich, Conn. 432 *N. Broadway.*
A. B., Yale University, 1894.

JOHN WILLIAMS COE, JR. Meriden, Conn. 127 *Jackson Place.*
Ph. B., Yale University, 1893.

WALTER COX. Bel Alton. 1703 *E. Madison St.*
A. B., Johns Hopkins University, 1894.

PERCY MILLARD DAWSON. Montreal, Canada. *The Altamont.*
A. B., Johns Hopkins University, 1894.

ARTHUR WELLS ELTING. Upper Red Hook, N. Y. 412 *N. Broadway.*
A. B., Yale University, 1894.

WILLIAM WEBER FORD. Norwalk, O. 912 *N. Calvert St.*
A. B., Adelbert College, 1893.

THOMAS WOOD HASTINGS. Morristown, N. J. 919 *N. Charles St.*
A. B., Johns Hopkins University, 1894.

ALFRED BIRCH HERRICK. Amsterdam, N. Y. 1727 *Fairmount Av.*
A. B., Williams College, 1894.

MARY MARGARET SEWALL JOHNSTONE. Newburyport, Mass.
A. B., Smith College, 1894; Harvard Summer School, 1894. 417 *N. Charles St.*

JAMES HALL MASON KNOX. New Haven, Conn. 13 *E. Preston St.*
A. B., Yale University, 1892, and Ph. D., 1894.

MILLARD LANGFELD. Baltimore. 2226 *Eutaw Place.*
A. B., Johns Hopkins University, 1893.

LEONA LEBUS. Los Angeles, Cal. 135 *Jackson Place.*
S. B., Wellesley College, 1889.

GERTRUDE LIGHT. Milwaukee, Wis. 711 *St. Paul St.*
S. B., University of Wisconsin, 1894.

FRANK ALLEMONG LUPTON. Auburn, Ala. 806 *N. Broadway.*
S. B., Alabama Polytechnic Institute, 1891, and M. S., 1892; Graduate Student, Johns Hopkins University, October to January, 1893-94.

JAMES DANIEL MADISON. Mazomanie, Wis. 127 *Jackson Place.*
S. B., University of Wisconsin, 1894.

FRANK STEVENS MALTBY. Aurora, Ind. 112 *E. Monument St.*
A. B., Moore's Hill College, 1893; Graduate Student, Johns Hopkins University, 1893-94.

HARRY TAYLOR MARSHALL. Baltimore. 1209 *St. Paul St.*
A. B., Johns Hopkins University, 1894.

DELIA MARIA O'CONNELL. Marlborough, Mass. 806 *N. Broadway.*
A. B., Vassar College, 1893; Graduate Student, Mass. Institute of Technology, 1893-94.

ROGER GRISWOLD PERKINS. Schenectady, N. Y. 1128 *McCulloh St.*
A. B., Union College, 1893, and Harvard University, 1894.

KATHERINE PORTER. Baltimore. 2100 *N. Calvert St.*
A. B., Bryn Mawr College, 1894.

JOSEPH HERSEY PRATT. North Middleboro, Mass. 112 *Jackson Place.*
Ph. B., Yale University, 1894.

GEORGIANA SANDS. Port Chester, N. Y. 812 *St. Paul St.*
A. B., Vassar College, 1893; Graduate Student, Barnard College (N. Y.), 1893-94.

BENJAMIN ROBINSON SCHENCK. Syracuse, N. Y. 806 *N. Broadway.*
A. B., Williams College, 1894.

HARRY MERRIMAN STEELE. Waterbury, Conn. *The Albany.*
Ph. B., Yale University, 1894.

WALTER RALPH STEINER. Baltimore. 1038 *N. Eutaw St.*
A. B., Yale University, 1892, and A. M., 1895; Graduate Student, Johns Hopkins University, 1892-94.

EMMA ELIZABETH WALKER. Parkersburg, W. Va. 417 *N. Charles St.*
A. B., Smith College, 1887.

ANDREW HENDERSON WHITRIDGE. Baltimore. 18 *W. Read St.*
S. B., Harvard University, 1894.

KATHERINE MARGARET WOLFE. Tiffin, O. 514 *N. Broadway.*
B. L. and S. B., Adrian College (Mich.), 1889; Graduate Student, Yale and Chicago Universities, 1893-94.

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First Year.

LAWRASON BROWN. Baltimore. 1517 *Bolton St.*
A. B., Johns Hopkins University, 1895.

EDWARD ERLE BROWNELL. Woodland, Cal. 935 *St. Paul St.*
Ph. B., Yale University, 1895.

HUMPHREY WARREN BUCKLER. Baltimore. 806 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

FRANK CURTISS DAVIS. Minneapolis, Minn. 935 *N. Calvert St.*
A. B., Amherst College, 1895.

JOHN STAIGE DAVIS. Sault Ste Marie, Mich. 517 *Cathedral St.*
Ph. B., Yale University, 1895.

CHARLES PHILLIPS EMERSON. Methuen, Mass. 103 *Jackson Place.*
A. B., Amherst College, 1894.

BLANCH N. EPLER. Oakland, Cal. 125 *E. North Av.*
S. B., University of California, 1895.

JOSEPH ERLANGER. San Francisco, Cal. 1640 *E. Fayette St.*
S. B., University of California, 1895.

PHILIP SAFFERY EVANS, JR. Baltimore. 1009 *Cathedral St.*
A. B., Yale University, 1895.

RICHARD HOLDEN FOLLIS, JR. San Francisco, Cal. 517 *Cathedral St.*
Ph. B., Yale University, 1895.

FRANK TAYLOR FULTON. Warsaw, Ill. 127 *Jackson Place.*
S. B., Knox College, 1894; A. B., Johns Hopkins University, 1895.

JAMES DATON GALLAGHER. Steubenville, O. 112 *Jackson Place.*
A. B., Johns Hopkins University, 1895.

HENRY HARRIS. Olympia, Wash. 521 *N. Wolfe St.*
A. B., Leland Stanford Jr. University, 1895.

CHARLES HERRMANN. Sterling, Ill. 814 *N. Broadway.*
S. B., University of Wisconsin, 1895.

HENRY JOSEPH HOYE. Providence, R. I. 516 *N. Broadway.*
A. B., Brown University, 1895.

KATE MCCLURE JOHNSON. Wooster, O. 806 *N. Broadway.*
Ph. B., University of Wooster, 1891.

LOUIS WILLIAMS LADD. New Haven, Conn. 412 *N. Broadway.*
A. B., Yale University, 1895.

CHARLES SUMNER LITTLE. Evansville, Ind. 110 *E. Madison St.*
A. B., Wabash College, 1894.

JOHN ARTHUR LUETSCHER. Sauk City, Wis. 127 *Jackson Place.*
S. B., University of Wisconsin, 1895.

ANNIE GALLOWAY LYLE. San Francisco, Cal. 213 *W. Monument St.*
A. B., Leland Stanford Jr. University, 1895.

FRANK WORTHINGTON LYNCH. Cleveland, O. 112 *Jackson Place.*
A. B., Adelbert College, 1895.

HUGH MILLER MOORE. Oxford, O. 1010 *N. Broadway.*
S. B. and M. S., Miami University, 1895.

EDWARD SPILLER OLIVER. Baltimore. 1725 *Bolton St.*
A. B., Johns Hopkins University, 1895.

CHARLES WILLIAMS OTTLEY. Atlanta, Ga. 1727 *Fairmount Av.*
A. B., Princeton College, 1893.

PAUL OCTAVIUS OWSLEY. Chicago, Ill. 517 *Cathedral St.*
Ph. B., Yale University, 1895.

JACOB HALL PLEASANTS, JR. Baltimore. 606 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

SYLVAN ROSENHEIM. Baltimore. 521 *N. Wolfe St.*
A. B., Johns Hopkins University, 1895.

JOHN ALBERTSON SAMPSON. Troy, N. Y. 103 *Jackson Place.*
A. B., Williams College, 1895.

HALBERT SEVERIN STEENSLAND. Madison, Wis. 814 *N. Broadway.*
S. B., University of Wisconsin, 1895.

WILLIAM RIDGELY STONE. Washington, D. C. 113 *W. Mulberry St.*
A. B., Princeton College, 1895.

EDGAR RANDOLPH STROBEL. Baltimore. 1713 *E. Baltimore St.*
A. B., Johns Hopkins University, 1895.

FREDERICK HERMAN VERHOEFF. Louisville, Ky. 935 *St. Paul St.*
Ph. B., Yale University, 1895.

WILLIAM STUART WALCOTT, JR. New York Mills, N. Y.
A. B., Yale University, 1894.

WILLIAM WHITRIDGE WILLIAMS. Baltimore. 1128 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

CHARLOTTE AUGUSTA WOLCOTT. Longmeadow, Mass. 812 *St. Paul St.*
A. B., Smith College, 1886.

SARAH DELIA WYCKOFF. Dayton, O. 1910 *E. Madison St.*
S. B., Wellesley College, 1894.

LAWRENCE YATES. Milwaukee, Wis. 935 *St. Paul St.*
Ph. B., Yale University, 1894; S. B., University of Wisconsin, 1895.

Physicians Attending Special Courses.

LOUIS F. ALVAREZ. Oviedo, Spain. 221 *N. Liberty St.*
M. D., Cooper Medical College, 1887. *Pathology and Bacteriology.*

MICHAEL T. ARSLANIDES. Cæsarea, Asia Minor. 303 *N. Broadway.*
M. D., University of Minnesota, 1893. *Medicine, Surgery, Gynecology, and Bacteriology.*

A. DUVAL ATKINSON. Baltimore. 615 *Cathedral St.*
M. D., University of Maryland, 1894. *Pathology.*

JOHN S. BISHOP. Snow Hill. 720 *N. Broadway.*
M. D., University of Pennsylvania, 1895. *Medicine, Surgery, and Gynecology.*

ETHEL BLACKWELL. Elizabeth, N. J. 1640 *E. Fayette St.*
M. D., Woman's Medical College (N. Y.), 1895. *Medicine and Special Research.*

E. BATES BLOCK. Atlanta, Ga. 819 *N. Broadway.*
M. D., Univ. of Virginia, 1895. *Medicine, Surgery, Gynecol., Pathol., and Bacteriol.*

LOUIS BRECHIMEN, Philadelphia, Pa. 520 *N. Charles St.*
M. D., University of Pennsylvania, 1876; Surgeon, U. S. Army. *Pathology.*

GEORGE S. BROWN. Birmingham, Ala. 1640 *E. Fayette St.*
M. D., Jefferson Medical Coll., 1885. *Medicine, Surgery, Gynecol., Pathol., and Bacteriol.*

MADISON O. BURKE. Honaker, Va. 600 *N. Broadway.*
M. D., Tulane University, 1891. *Medicine, Surgery, and Gynecology.*

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M. D., McGill University, 1883. *Medicine, Surgery, and Gynecology.*

STUART CASSARD. Baltimore. *Arlington.*
M. D., Baltimore Medical College, 1895. *Medicine and Pathology.*

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M. D., North Carolina Medical College, 1895. *Medicine, Surgery, and Gynecology.*

CLARIBEL CONE. Baltimore. 1607 *Eutaw Place.*
M. D., Woman's Medical College (Balt.), 1890. *Special Research.*

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M. D., College of Physicians and Surgeons (Balt.), 1895. *Medicine, Surgery, and Gynecology.*

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Ph. B., Northwestern University, 1892, and M. D., 1895. *Medicine, Surgery, Gynecology, Pathology, and Bacteriology.*

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M. D., Woman's Medical College (N. Y.), 1895. *Medicine, Surgery, and Gynecology.*

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M. D., University of Maryland, 1894. *Pathology and Bacteriology.*

WILLIAM H. CROTHERS. San Jose, Cal. 514 *N. Broadway.*
M. D., Cooper Med. Coll., 1895. *Medicine, Surgery, Gynecol., Pathol., and Bacteriol.*

WILLIAM S. DAVIDSON. Hopewell, N. C. 1029 *Madison Av.*
M. D., University of Maryland, 1887. *Medicine.*

CORNELIUS DEWEESE. Denton. 1614 *E. Chase St.*
M. D., Jefferson Medical College, 1895. *Medicine, Pathology, and Bacteriology.*

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M. D., Southern Medical College (Ga.), 1894. *Pathology.*

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M. D., College of Physicians and Surgeons (N. Y.), 1895. *Pathology and Bacteriology.*

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M. D., Woman's Medical College (Balt.), 1894. *Medicine, and Pathology.*

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M. D., College of Physicians and Surgeons (Balt.), 1895. *Pathology and Bacteriology.*

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M. D., University of Virginia, 1895. *Medicine.*

JOSEPH F. FOX. New Philadelphia, O. 16 *W. Franklin St.*
M. D., University of Wooster, 1887. *Medicine, Surgery and Gynecology.*

ALMAH J. FRISBY. Milwaukee, Wis. *The Clifton.*
M. D., Boston University, 1883. *Pathology and Bacteriology.*

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M. D., Physicians and Surgeons (Balt.), 1895. *Medicine, Surgery, Gynecol., and Pathol.*

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M. D., University of Pennsylvania, 1895. *Pathology and Bacteriology.*

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M. D., Kansas Medical College, 1892. *Special Research.*

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M. D., Bellevue Hospital, 1883. *Medicine, Surgery, Gynecol., Pathol., and Bacteriol.*

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M. D., University of Maryland, 1879. *Pathology and Bacteriology.*

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M. D., Bellevue Hospital Medical College, 1880. *Special Research.*

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M. D., Woman's Medical College (Phila.), 1885. *Bacteriology.*

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A. B., Johns Hopkins University, 1892; M. D., University of Maryland, 1895. *Medicine, Surgery, Gynecology, and Pathology.*

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M. D., University of Pennsylvania, 1884. *Bacteriology.*

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M. D., Univ. of Virginia, 1895. *Medicine, Surgery, Gynecol., Pathol., and Bacteriol.*

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M. D., University of Maryland, 1895. *Medicine and Pathology.*

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M. D., Jefferson Medical College, 1894. *Pathology and Bacteriology.*

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M. D., Woman's Med. Coll. (Chicago), 1888. *Medicine, Surgery, Gynecol., and Pathol.*

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M. D., University of Pennsylvania, 1887. *Medicine.*

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M. D., Woman's Medical Coll. (N. Y.), 1894. *Medicine, Surgery, Gynecol., Pathol., and Bacteriol.*

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M. D., Western Pa. Medical College, 1894. *Gynecology.*

AUGUSTE L. J. LARTIGAU. San Francisco, Cal. 303 *N. Broadway.*
M. D., Univ. of California, 1895. *Medicine, Surgery, Gynecology, Pathology, and Bacteriology.*

CAROLINE C. LAWRENCE. Asheville, N. C. 1416 *E. Biddle St.*
M. D., Woman's Med. Coll. (Phila.), 1894. *Medicine, Surgery, Gynecol., and Pathol.*

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M. D., University of Maryland, 1888. *Gynecology.*

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M. D., Bowdoin Medical College, 1888. *Medicine.*

EDWARD MILHOLLAND, JR. Baltimore. 115 *W. Franklin St.*
M. D., University of Maryland, 1895. *Pathology.*

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M. D., Woman's Medical College (Phila.), 1889. *Medicine, Surgery, and Gynecology.*

JOHN C. MORFIT. Baltimore. *City Hospital.*
M. D., College of Physicians and Surgeons (Balt.), 1895. *Pathology.*

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M. D., University of Virginia, 1895. *Medicine and Pathology.*

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M. D., Baltimore Medical College, 1895. *Pathology and Bacteriology.*

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Bacteriology and Pathology.

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M. D., Baltimore Medical College, 1895. *Medicine, Surgery, and Gynecology.*

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M. D., Boston University, 1883. *Medicine.*

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M. D., Atlanta Medical College, 1891. *Medicine and Pathology.*

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M. D., Georgetown University (D. C.), 1894. *Medicine.*

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M. D., University of Pennsylvania, 1894. *Special Research and Pathology.*

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M. D., College of Physicians and Surgeons (N. Y.), 1890. *Medicine, Surgery, Gynecol., and Pathol.*

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M. D., University of Maryland, 1891. *Surgery.*

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M. D., University of Virginia, 1895. *Medicine, Surgery, Gynecology, and Pathology.*

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M D., Woman's Medical Coll. (Phila.), 1890. *Medicine, Surgery, Gynecol., and Pathol.*

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M. D., Woman's Medical College (Phila.), 1895. *Medicine and Bacteriology.*

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M. D., University of Pennsylvania, 1895. *Gynecology.*

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M. D., Woman's Medical College (Phila.), 1894. *Medicine, Surgery, and Gynecol.*

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M. D., University of Maryland, 1891. *Bacteriology.*

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M. D., Baltimore Medical College, 1895. *Pathology and Bacteriology.*

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M. D., Ohio Medical College, 1893. *Pathology.*

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GEORGE FREDERICK BAMPTON. Harvard College. *Group IV.*	Derry, N. H.	724 *N. Howard St.*
CORNELIUS BEATTY. Baltimore City College, 1893. *Group III.*	Baltimore.	2218 *N. Charles St.*
AUGUSTUS CÆSAR BINSWANGER. Baltimore City College. *Group II.*	Baltimore.	1619 *Eutaw Place.*
FRANK RINGGOLD BLAKE. Baltimore City College, 1894. *Group VII.*	Baltimore.	1917 *Druid Hill Av.*
CHARLES EDWARD CASPARI. Baltimore City College, 1893. *Group IV.*	Baltimore.	1129 *Harlem Av.*
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CHARLES EDWARD DIEHL. Private Instruction. *Group II.*	Charlestown, W. Va.	1115 *Linden Av.*
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University of Virginia. *Group VI.*

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University School (Kansas City). *Group VI.*

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Mr. Lamb's School. *Group II.*

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Emerson Institute. *Group VII.*

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Private Instruction. *Group III.*

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Dr. Deichmann's School. *Group I.*

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Private Instruction. *Group III.*

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Mr. Marston's School. *Group II.*

JOHN EDGAR KNIPP. Baltimore. 2510 *Druid Hill Av.*
Milton Academy. *Group I.*

WILLIAM KURRELMEYER. Baltimore. 1051 *S. Eutaw St.*
Baltimore City College, 1893. *Group VII.*

ROBERT LACY. Baltimore. 1630 *Linden Av.*
Mr. Marston's School. *Group II.*

HENRY LANAHAN. Baltimore. *Govanstown.*
Baltimore City College, 1893. *Group II.*

THEODORE MORGAN LEARY. Baltimore. *Fort McHenry.*
Mr. C. Maupin, Instructor. *Group VII.*

WILLIAM STROBEL LEVY. Frederick. 1217 *Madison Av.*
Frederick College. *Group VI.*

WARFIELD THEOBALD LONGCOPE. Baltimore. 136 *Richmond St.*
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MONROE LUCHS. Washington, D. C. 100 *E. Twenty-first St.*
Private Instruction. *Group VI.*

HENRY JOHN LUCKE. Baltimore. 519 *N. Carey St.*
Baltimore City College, 1895. *Group II.*

CHARLES EDWARD LYON. Mt. Wilson. *Druid Hill Av. and Robert St.*
Private Instruction. *Group V.*

ARTHUR WEBSTER MACHEN, JR. Baltimore. 217 *W. Monument St.*
Mr. Marston's School. *Group II.*

RICHARD ELLIOTT MARINE. Baltimore. 2514 *Madison Av.*
Milton Academy. *Group II.*

DAVID GREGG MCINTOSH, JR. Towson. *Towson.*
Mr. Marston's School. *Group VI.*

FRANK OLDHAM MILLER. Baltimore. 709 *W. Lombard St.*
Dr. Deichmann's School. *Group VII.*

RAYMOND DURBIN MILLER. Catonsville. *Catonsville.*
Baltimore City College, 1895. *Group I.*

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Mr. Marston's School. *Group III.*

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Mr. Lamb's School. *Group IV.*

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Max-Gymnasium, Munich. *Group III.*

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Mr. C. Maupin, Instructor. *Group VI.*

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Dr. Deichmann's School. *Group VI.*

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Baltimore City College, 1895. *Group III.*

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Baltimore City College, 1894. *Group I.*

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Dr. Deichmann's School. *Group I.*

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Baltimore City College, 1895. *Group VI.*

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King Henry Eighth's School (England). *Group VII.*

JOSEPH ROYALL SHERBERT. Baltimore. 516 *N. Fremont St.*
Baltimore City College, 1895. *Group VI.*

HENRY PLANT SHUTER. Baltimore. 301 *E. North Av.*
Baltimore City College. *Group III.*

ST. GEORGE LEAKIN SIOUSSAT. Lake Roland. *Lake Roland.*
Mr. Marston's School. *Group I.*

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Mr. Marston's School. *Group III.*

FREDERICK WILLIAMSON SMITH. Baltimore. 4 *E. Biddle St.*
Mr. Marston's School. *Group I.*

ROBERT MARSDEN SMITH. Baltimore. 4 *E. Biddle St.*
Mr. Marston's School. *Group I.*

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Private Instruction. *Group III.*

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Baltimore City College, 1895. *Group VII.*

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Phillips Academy, Andover. *Group IV.*

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Baltimore City College, 1893. *Group I.*

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Mr. Marston's School. *Group IV.*

JAMES MCILHANY THOMSON. Summit Point, W.Va. 303 *E. Preston St.*
Shenandoah University School. *Group VI.*

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Baltimore City College, 1893. *Group VI.*

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Baltimore City College, 1893. *Group VI.*

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Mr. Marston's School. *Group VI.*

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Baltimore City College. *Group III.*

CHARLES WILLIAM WAIDNER. Baltimore. 406 *N. Fremont St.*
Mr. Lamb's School. *Group II.*

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Baltimore City College, 1893. *Group II.*

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Baltimore City College, 1893. *Group VI.*

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Lawrenceville School. *Group III.*

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Baltimore City College, 1894. *Group II.*

JOHN ARMISTEAD WELBOURN. Baltimore. 1707 *N. Calvert St.*
Baltimore City College, 1893. *Group I.*

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Dr. Deichmann's School. *Group III.*

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Shattuck School. *Group III.*

Candidates for Matriculation.

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HENRY BOGUE. Baltimore. 843 *Park Av.*
Loyola College. *Preliminary Year.*

ROBERT H. BOGUE. Baltimore. 843 *Park Av.*
Loyola College. *Preliminary Year.*

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Middletown High School. *Group III.*

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Mr. Marston's School. *Group VI.*

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Shattuck School. *Group III.*

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Mr. C. Maupin, Instructor. *Group VI.*

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Dr. Deichmann's School. *Group VI.*

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Mr. Lamb's School. *Preliminary Year.*

EDDY BURKE FOSNOCHT. Camden, Del. 342 *W. Biddle St.*
Wilmington Conference Academy. *Preliminary Year.*

WILLIAM WILLOUGHBY FRANCIS. Toronto, Ont. 1 *W. Franklin St.*
Trinity College School (Ontario). *Group III.*

HOWARD MAIN GASSMAN. Hagerstown. 1115 *Linden Av.*
Washington County High School. *Group II.*

JOHN REED GEMMILL. York, Pa. 1315 *Madison Av.*
York Collegiate Institute. *Preliminary Year.*

WILLIAM BROWNE HAMMOND, JR. Baltimore. 1516 *E. Biddle St.*
Dr. Deichmann's School. *Group VI.*

STEPHEN PAUL HARWOOD. Baltimore. 1532 *Park Av.*
The Carey School. *Group III.*

LEONARD KEENE HIRSHBERG. Baltimore. 581 *N. Gay St.*
Private Instruction. *Preliminary Year.*

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Dr. Deichmann's School. *Group VI.*

KARL JUNGBLUTH. Louisville, Ky. *The Shirley.*
Mr. A. Flexner, Instructor. *Preliminary Year.*

MARION JUNGBLUTH. Louisville, Ky. *The Shirley.*
Mr. A. Flexner, Instructor. *Preliminary Year.*

CHARLES WESLEY KALB. Catonsville. *Catonsville.*
Dr. Deichmann's School. *Group VI.*

JOHN ALBERT KALB. Catonsville. *Catonsville.*
Maryland State Normal School. *Preliminary Year.*

JAMES ALFRED KENNARD. Baltimore. 2118 *N. Charles St.*
The Carey School. *Group VI.*

LOUIS CHARLES LEHR. Baltimore. 12 *E. Chase St.*
Mr. C. Maupin, Instructor. *Group II.*

JOSHUA LEVERING, JR. Baltimore. 1316 *Eutaw Place.*
Mr. Marston's School. *Preliminary Year.*

HENRY PERKINS MCCURDY. Athens, Pa. 520 *N. Charles St.*
Private Instruction. *Group VII.*

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Dr. Deichmann's School. *Group II.*

JOHN HOWARD PALMER. Baltimore. *Roland Park.*
Dr. Deichmann's School. *Group VII.*

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McDonogh School. *Group II.*

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CHARLES MALLORY REMSEN. Baltimore. 12 *E. Biddle St.*
Mr. Marston's School. *Preliminary Year.*

EDWARD AYRAULT ROBINSON, JR. Baltimore. *Mt. Washington.*
Mr. Marston's School. *Group VI.*

GEORGE CANBY ROBINSON. Baltimore. *Mt. Washington.*
Mr. Marston's School. *Preliminary Year.*

ARMIN FREDERICK SELLHAUSEN. Washington, D. C. 2028 *Park Av.*
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Mr. C. Maupin, Instructor. *Mathematics and Physics.*

REINIER KOLLER BEEUWKES. Baltimore. 2005 *Druid Hill Av.*
Baltimore City College, 1895. *Mathematics and Physics.*

ALBERT HINSON CARROLL. Baltimore. 18 *E. Madison St.*
Mr. Marston's School. *Mathematics and Chemistry.*

GEORGE CATOR. Baltimore. 803 *St. Paul St.*
Mr. Carey's School. *Chemistry.*

GEORGE EMERSON COX. Baltimore. 1109 *Madison Av.*
Mr. Lamb's School. *Chemistry, etc.*

ISIDOR DEUTSCH. Baltimore. 409 *N. Carrollton Av.*
Dr. Deichmann's School. *Electricity.*

WILLIAM TROUT EVERETT. Baltimore. *Fort McHenry.*
Mr. C. Maupin, Instructor. *Mathematics and Physics.*

JAMES HOLDSWORTH GORDON, JR. Georgetown, D. C. 917 *McCulloh St.*
Columbian University. *Electricity.*

WILLIAM SCHROEFIELD GORSUCH, JR. Baltimore. 1025 *N. Carey St.*
Private Instruction. *Mathematics and Physics.*

MALCOLM WESTCOTT HILL. Baltimore. 1302 *McCulloh St.*
St. Paul's School (L. I.). *Electricity.*

GEORGE HARWOOD HODGES. Baltimore. 1402 *Bolton St.*
Private Instruction. *Electricity.*

WILLIAM LEMMON HODGES. Baltimore. 1402 *Bolton St.*
Mr. Marston's School. *Mathematics and Physics.*

ARTHUR CARVIL HOWARD. Bel Air. *Bel Air.*
Dr. Deichmann's School. *Chemistry and Physics.*

FERDINAND BRAUNS KEIDEL. Catonsville. *Catonsville.*
Baltimore Polytechnic Institute. *Mathematics and Physics.*

BERTRAM MOTTER KERSHNER. Emmittsburg. 846 *N. Eutaw St.*
Private Instruction. *Mathematics and Physics.*

FRANK ALBERT KILLMON. St. Denis. *St. Denis.*
Private Instruction. *Group I.*

JOHN HENRY MADISON. Baltimore. 1789 *E. Pratt St.*
Dr. Deichmann's School. *Mathematics and Physics.*

JASPER ALAN MCCASKELL. Salt Lake City, Utah. 212 *W. Monument St.*
Mr. Marston's School. *Electricity.*

HENRY CLAY MCCOMAS, JR. Baltimore. 1019 *N. Charles St.*
University of Virginia. *Group VI.*

LAWRENCE ALEXANDER NAYLOR. Baltimore. 703 *Lennox St.*
Mr. Lamb's School. *Mathematics and Physics.*

EDWIN DELAPLAINE NELSON. Baltimore County. *Sherwood.*
Mr. Marston's School. *Chemistry, etc.*

JAMES GIRVIN PETERS. Baltimore. 1117 *McCulloh St.*
Mr. Marston's School. *Chemistry and Physics.*

FRANK HART PHELPS. Baltimore. *Walbrook.*
Mr. Marston's School. *Mathematics and Physics.*

HENRY TODD POWELL. Baltimore. 1139 *E. Fayette St.*
Baltimore City College. *Electricity.*

CHARLES LEONARD REEDER. Baltimore. 1716 *Druid Hill Av.*
Private Instruction. *Electricity.*

HUGH ROBERTSON RICHARDS. Indianapolis, Ind. 1211 *Bolton St.*
Indianapolis High School. *English, etc.*

WILLIAM EDWARD SCHLOEGEL. Baltimore. 406 *S. Bond St.*
University of Maryland (Law School). *History, etc.*

MARTIN SCHWAB. Baltimore. 1729 *Madison Av.*
Private Instruction. *Electricity.*

EDWARD JOEL SEARLES. Baltimore. 2027 *N. Calvert St.*
Baltimore City College. *Mathematics and Physics.*

CHARLES SPENCER. Baltimore. 709 *W. Fayette St.*
Baltimore City College, *Mathematics and Physics.*

JAMES CARLYLE STEPHENS. Norfolk, Va. 932 *Madison Av.*
Norfolk Academy. *Mathematics and Physics.*

JAMES WILLIAM SWAINE. Baltimore. 1918 *Mt. Royal Av.*
Baltimore City College, 1895. *Mathematics and Physics.*

WILLIAM BURTON THARP. Farmington, Del. 1805 *Edmondson Av.*
Amherst College. *Physics and Chemistry.*

JOHN WILLIAMS THOMAS. Hokendauqua, Pa. 11 *W. Franklin St.*
Lehigh University. *Mathematics and Physics.*

CARL EARNEST VAN CLEVE. Minneapolis, Minn. 1230 *McCulloh St.*
University of Minnesota. *Chemistry.*

SAMUEL WOODSON VENABLE, JR. Petersburg, Va. 913 *N. Charles St.*
University School, Richmond. *Greek and Latin.*

JAMES DE LANCEY VER PLANCK. Fishkill, N. Y. 302 *Dolphin St.*
Private Instruction. *Latin and Mathematics.*

HERBERT WINSEY. Baltimore. 1220 *E. Fayette St.*
Private Instruction. *Mathematics and Physics.*

(38)

ATTENDANTS ON SINGLE COURSES OF LECTURES.

History and Politics.

ROBERT BURTON. Baltimore. 1726 *N. Charles St.*
Law School, University of Maryland.

JOHN W. D. JUMP. Easton. 208 *W. Franklin St.*
Law School, University of Maryland.

Philosophy.

CLARENCE H. FORREST. Baltimore. 424 *N. Carrollton Av.*
Law School, University of Maryland.

(3)

GOVERNMENT OF THE JOHNS HOPKINS UNIVERSITY.

TRUSTEES.

The Trustees are the ultimate source of authority in all matters pertaining to the University. They act collectively, through the standing committees named on page 2, and through the President of the University, who is *ex officio* a member of the Board.

PRESIDENT.

Daniel C. Gilman.

The duties of this office were thus defined by the Trustees, September 14, 1876.

The President of the University is the authorized means of communication between the Board and the various officers of instruction and administration employed in the University; it shall be his duty to consult with the Professors in respect to the development of their various departments, and the general interests of the University; to determine the appropriate duties of the Associates and Fellows; and to exercise such superintendence over the buildings, apparatus, books, and other property as will insure their protection and appropriate use. In respect to these matters and all others which concern the welfare of the University, he shall consult frequently with the Executive Committee, and he shall attend the meetings of the Board of Trustees. Purchases, alterations, repairs, and other incidental expenses must not be ordered by any of the officers of the University without his previous assent, or the expressed authority of the Board.

ACADEMIC COUNCIL.

D. C. Gilman (*Pres.*),	H. A. Rowland,	Simon Newcomb,
B. L. Gildersleeve,	Paul Haupt,	E. H. Griffin,
Ira Remsen (*Sec'y*),	W. H. Welch,	H. B. Adams.

By authority of the Trustees, the Academic Council (now consisting of the President and eight Professors) has met since the organization of the University to guide the various departments of study, to select the Fellows, and to act upon such other matters as may be brought before them.

BOARD OF UNIVERSITY STUDIES.

D. C. Gilman (*Pres.*),	Thomas Craig,	E. H. Spieker,
B. L. Gildersleeve,	A. M. Elliott,	Louis Duncan,
Ira Remsen,	H. N. Morse,	E. A. Andrews,
H. A. Rowland,	Minton Warren,	J. S. Ames,
Paul Haupt,	G. H. Emmott (*Sec'y*),	K. F. Smith,
W. H. Welch,	Henry Wood,	Adolf Rambeau,
Simon Newcomb,	W. H. Howell,	A. S. Chessin,
E. H. Griffin,	J. W. Bright,	C. L. Poor,
H. B. Adams,	W. Hand Browne,	Sidney Sherwood,
W. K. Brooks,	W. B. Clark,	J. M. Vincent.
Maurice Bloomfield,		

By request of the Academic Council (October 8, 1883), this Board, consisting of the President, twenty Professors, and ten Associate Professors, has charge of the arrangements for the instruction of graduate students, and of the examinations for the degree of Doctor of Philosophy.

ADVISORY BOARD OF THE MEDICAL SCHOOL.

D. C. Gilman, (*Pres.*),	H. M. Hurd,	J. J. Abel,
Ira Remsen,	H. A. Kelly,	W. H. Howell,
W. H. Welch, (*Dean*),	W. K. Brooks,	F. P. Mall.
William Osler,	W. S. Halsted,	

This Board was constituted by resolution of the Trustees (April 3, 1893) "to report to the Trustees from time to time their suggestions, and to prepare and carry forward the proper arrangements for the instruction and graduation of medical students."

BOARD OF COLLEGIATE ADVISERS.

D. C. Gilman (*Pres.*),	Henry Wood,	J. S. Ames,
Ira Remsen,	Edward Renouf,	K. F. Smith,
E. H. Griffin (*Dean*),	W. H. Howell,	Adolf Rambeau,
H. B. Adams,	W. Hand Browne,	Sidney Sherwood,
A. M. Elliott,	H. E. Greene,	J. M. Vincent,
H. N. Morse,	E. H. Spieker (*Sec'y*),	L. S. Hulburt,
Minton Warren,	Louis Duncan,	W. W. Randall.
G. H. Emmott,	E. A. Andrews,	

By request of the Academic Council (May 13, 1882), the Board of Collegiate Advisers, consisting of the President and of representatives from each of the chief departments of undergraduate study, confers upon the progress made by the undergraduates and special students, and conducts the examinations for matriculation and for the Baccalaureate degree, under the direction of the Academic Council. The other teachers of undergraduates may be called in from time to time to consult.

By resolution of this Board (June 15, 1888), a Standing Committee was appointed to act on all routine matters. The Committee now consists of E. H. Griffin, E. Renouf, E. H. Spieker, and S. Sherwood.

COMMITTEE ON THE LIBRARY.

D. C. Gilman (*Pres.*),	Ira Remsen,	N. Murray (*Sec'y*).
B. L. Gildersleeve,	W. Hand Browne,	

COMMITTEE ON THE GYMNASIUM.

D. C. Gilman (*Pres.*),	James Carey Thomas, M. D.,	The Director of the
Alan P. Smith, M. D.,		Gymnasium.

ADVISORY BOARD OF THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

D. C. Gilman (*Pres.*),	James Carey Thomas, M. D.,	B. C. Steiner.
E. H. Griffin (*Sec'y*),		

TABULAR STATEMENTS.

1. Professors and Instructors, 1895–96.

President and Professors,	30
Associate Professors,	11
Associates,	17
Instructors and Assistants,	27
Lecturers,	21
	106*

*This number includes 23 professors and other instructors whose work lies wholly in the Medical School.

2. Enrolled Students, 1895–96.

Fellows by Courtesy,	16
Fellows,	23
Other Graduates,	212
Candidates for the Degree of M. D.,	86
Physicians attending Special Courses,	69
Undergraduates,	149
Special Students,	41
	596

The above enumeration of students includes—

Doctors of Medicine,	74	Bachelors of Science,	58
Doctors of Philosophy,	15	Bachelors of Philosophy,	19
Masters of Arts,	62	Other Graduates,	23
Masters of Science,	8	Clergymen,	9
Bachelors of Arts,	235		

3. Attendance upon the Various Courses of Instruction, 1895–96.

Mathematics and Astronomy,	126	Sanskrit and Comp. Philology,	46
Physics,	132	Semitic Languages,	18
Chemistry,	123	German,	167
Geology and Mineralogy,	37	Romance Languages,	92
Biology,	92	English and Anglo-Saxon,	148
Pathology and Bacteriology,	49	History and Political Science,	104
Greek,	56	Philosophy,	49
Latin,	84	Drawing,	91

4. CLASSIFICATION BY RESIDENCES OF STUDENTS, 1895–96.

Maryland (Baltimore, 227),	272	Colorado,	2
Virginia,	36	Delaware,	2
Pennsylvania,	29	Iowa,	2
New York,	25	Kansas,	2
Ohio,	25	Louisiana,	2
Massachusetts,	17	Michigan,	2
North Carolina,	17	Oregon,	2
District of Columbia,	16	Texas,	2
Kentucky,	14	Utah,	2
Illinois,	13	Florida.	1
California,	10	Idaho,	1
Indiana,	10	Missouri,	1
Wisconsin,	10	Mississippi,	1
Connecticut,	9	Nebraska,	1
New Jersey,	8	Tennessee,	1
Georgia,	7	Vermont,	1
Alabama,	6	Washington,	1
Maine,	6		
South Carolina,	6	Canada,	15
Minnesota,	5	Italy,	2
West Virginia,	4	Asia Minor,	1
New Hampshire,	3	Spain,	1
Rhode Island,	3		

5. SUMMARY OF ATTENDANCE, 1876–96.

Years.	Teachers.	Total Enrolled Students.	Graduate Students, including Medical.	Under-graduates.	Special Students.	Degrees Conferred.	
						A. B.	Ph. D.
1876–77	29	89	54	12	23	—	—
1877–78	34	104	58	24	22	—	4
1878–79	25	123	63	25	35	3	6
1879–80	33	159	79	32	48	16	5
1880–81	39	176	102	37	37	12	9
1881–82	43	175	99	45	31	15	9
1882–83	41	204	125	49	30	10	6
1883–84	49	249	159	53	37	23	15
1884–85	52	290	174	69	47	9	13
1885–86	49	314	184	96	34	31	17
1886–87	51	378	228	108	42	24	20
1887–88	57	420	231	127	62	34	27
1888–89	55	394	216	129	49	36	20
1889–90	58	404	229	130	45	37	33
1890–91	66	468	276	141	51	50	28
1891–92	65	547	337	140	70	41	37
1892–93	72	551	347	133	71	40	28
1893–94	83	522	344	123	55	41	33
1894–95	86	589	412	126	51	37	48
1895–96	106	596	406	149	41	—	—

6. INSTITUTIONS IN WHICH THE STUDENTS (1895-96) WERE GRADUATED.

Johns Hopkins University,	76	Wooster University,	3
Yale University,	21	Bellevue Hospital Med. College,	2
Wisconsin, University of,	9	Boston University,	2
Maryland, University of,	8	Bowdoin College,	2
Pennsylvania, University of,	8	Central University (Ky.),	2
Virginia, University of,	8	Colby University,	2
Ohio Wesleyan University,	7	Columbia College,	2
Randolph Macon College,	7	Cooper Medical College,	2
Amherst College,	6	Earlham College,	2
Dickinson College,	6	Indiana University,	2
Harvard University,	6	Kentucky State College,	2
Princeton University,	6	Leland Stanford Jr. University,	2
Toronto, University of,	6	Marietta College,	2
Virginia Military Academy,	6	Maryland Agricultural College,	2
Williams College,	6	Midland College,	2
Woman's Medical College (Phila.),	6	Minnesota, University of,	2
St. Mary's Seminary (Balt.),	5	Moore's Hill College,	2
Baltimore Medical College,	4	North Carolina, University of,	2
California, University of,	4	Northwestern University,	2
Cincinnati, University of,	4	Notre Dame University,	2
Dalhousie University,	4	Phys. and Surg., College of (N. Y.),	2
Hampden Sidney College,	4	Queen's University (Ont.),	2
Haverford College,	4	Roanoke College,	2
Illinois Wesleyan University,	4	Rose Polytechnic Institute,	2
Phys. and Surg., College of (Balt.),	4	South Carolina, University of,	2
Smith College,	4	Southern University (Ala.),	2
St. John's College,	4	Tulane University,	2
Syracuse University,	4	Ursinus College,	2
Wake Forest College,	4	Virginia Theological Seminary,	2
Adelbert College,	3	Washington and Lee University,	2
Alabama, University of,	3	Wellesley College,	2
Cornell University,	3	Wesleyan University (Conn.),	2
Davidson College,	3	Westminster College (Pa.),	2
Franklin and Marshall College,	3	William and Mary College,	2
Hebrew Union College,	3	Woman's Medical College (Balt.),	2
Jefferson Medical College,	3	Adrian College,	1
Massachusetts Inst. of Technology,	3	Albion College	1
Michigan, University of,	3	Allegheny College,	1
Mississippi College,	3	Atlanta Medical College,	1
Richmond College,	3	Baldwin University,	1
Union College,	3	Bethany College,	1
Vassar College,	3	Brown University,	1
Woman's Medical College (N. Y.),	3	Bryn Mawr College,	1

Buchtel College,	1	Milligan College,	1
Calvin College,	1	Mississippi Agricultural College,	1
Carthage College,	1	Mt. St. Mary's College,	1
Case School of Applied Science,	1	Nashville, University of,	1
Catholic University (Paris),	1	Newberry College,	1
Charleston College,	1	New Orleans, University of,	1
Colorado School of Mines,	1	New York University,	1
Colorado, University of,	1	Niagara University,	1
Concordia College (Wis.),	1	Oberlin College,	1
Concordia Seminary (Mo.),	1	Ohio Medical College,	1
De Pauw University,	1	Oregon Agricultural College,	1
Erskine College,	1	Oregon, University of,	1
Furman University,	1	Pennsylvania College,	1
German Wallace College,	1	Pennsylvania State College,	1
Hamilton College,	1	Princeton Theological Seminary,	1
Iowa Agricultural College,	1	St. Godard, College of (France),	1
Iowa State University,	1	Southwestern Presbyterian Univ.,	1
Kentucky University,	1	South, University of the,	1
Kentucky Wesleyan College,	1	Stevens Institute of Technology,	1
Knox College,	1	Swarthmore College,	1
Lafayette College,	1	Tennessee, University of,	1
Lehigh University,	1	Texas, University of,	1
Leipsic, University of,	1	Trinity College (N. C.),	1
Long Island Medical College,	1	Union Theological Sem'y (N. Y.),	1
Louisville Theological Seminary,	1	Virginia Agricultural College,	1
Loyola College,	1	Wabash College,	1
Lyon, Seminary of (France),	1	Washington College (Md.),	1
Luther College,	1	West Virginia University,	1
Miami University,	1	Western Maryland College,	1
McGill University,	1	Western Pa. Medical College,	1
Mercer University,	1	Wittenberg College,	1
Michigan Agricultural College,	1	Wofford College,	1
Middlebury College,	1	Woman's Med. College (Chicago),	1

7. Fellows.

Bruce Memorial Fellows in Biology.

This Fellowship was instituted by Mrs. Bruce, of New York, to commemorate the name of her son, Adam T. Bruce, Jr., Ph. D., Fellow in Biology, 1883–84, and Instructor in Osteology and Mammalian Anatomy, 1886–87. Preference is given to those who have held an ordinary Fellowship in Biology.

1888. Henry Van Peters Wilson, Ph. D. (1888), Professor of Biology, University of North Carolina.

1889. Shozaburo Watase, Ph. D. (1890), Assistant Professor of Cellular Biology, University of Chicago.

1890. Thomas Hunt Morgan, Ph. D. (1890), Professor of Biology, Bryn Mawr College. *Reappointed* 1891, *but resigned.*

1891, 1892. Robert Payne Bigelow, Ph. D. (1892), Instructor in Zoology, Massachusetts Institute of Technology.

1893. Maynard Mayo Metcalf, Ph. D. (1893), Associate Professor of Biology, Woman's College of Baltimore.

1894. Ross Granville Harrison, Ph. D. (1894), Lecturer in Morphology, Bryn Mawr College, 1894–95. *Did not enter on the fellowship.*

1894. Seitaro Goto, S. D., Graduate Student, Harvard University.

1895. Henry McElderry Knower, A. B. (1890). (Now in residence).

1895. George Lefevre, A. B. (1891). (Now in residence).

Fellows.

(Arranged under the date of first appointment. Figures in brackets indicate the tenure of the fellowship, when it was held more than one year. *—Deceased.)

1876.

Henry Carter Adams, Ph. D., Professor of Political Economy and Finance, University of Michigan; Statistician, Interstate Commerce Commission.—[1876–79].

Herbert Baxter Adams, Ph. D., LL. D., Professor of American and Institutional History (J. H. U.).—[1876–78].

William Keith Brooks, Ph. D., LL. D., Professor of Zoölogy (J. H. U.); Director of the Chesapeake Zoölogical Laboratory. *Did not enter on the fellowship.*

Samuel Fessenden Clarke, Ph. D., Professor of Natural History, Williams College.—[1876–79].

Thomas Craig, Ph. D., Professor of Pure Mathematics (J. H. U.).—[1876–79].

Joshua Walker Gore, C. E., Professor of Natural Philosophy and Engineering, University of North Carolina.—[1876–78].

George Bruce Halsted, Ph. D., Professor of Mathematics, University of Texas.—[1876–78].

Edward Hart, Ph. D., Professor of Analytical Chemistry, Lafayette College.—[1876–78].

Daniel Webster Hering, C. E., Professor of Physics, Univ. of the City of New York.—[1876–78].

Malvern Wells Iles, Ph. D., Chemist, Denver, Colorado.—[1876–78].

William White Jacques, Ph. D., Lecturer on Telegraph Engineering, Massachusetts Institute of Technology, 1885–91; Electrician, Boston, Mass.—[1876–79].

Charles Rockwell Lanman, Ph. D., Professor of Sanskrit, Harvard University.

David McGregor Means, A. B., Professor of Political and Mental Science, Middlebury College, 1877–80; Attorney at Law, New York City.

Harmon Northrop Morse, Ph. D., Professor of Analytical Chemistry (J. H. U.). *Did not enter on the fellowship.*

Walter Hines Page, Professor in Louisville (Ky.) Male High School, 1878–79; Editor of *The Forum*, New York City.—[1876–78].

*Peter Porter Poinier, M. E. *Did not enter on the fellowship.*

Erasmus Darwin Preston, C. E., U. S. Coast and Geodetic Survey, Washington.—[1876–78].

*Henry Joseph Rice, Sc. D., Professor of Natural Sciences, Brooklyn (N. Y.) High School, 1882–85.—[1876–78].

Josiah Royce, Ph. D., Professor of Philosophy, Harvard Univ.—[1876–78].

Alexander Duncan Savage, B. Litt., New York City.—[1876–79].

Ernest Gottlieb Sihler, Ph. D., Professor of Latin, University of the City of New York.—[1876–79].

Frederick Boyd Van Vorst, A. B., Attorney at Law, New York City.

*John Henry Wheeler, Ph. D., Professor of Greek, University of Virginia, 1882–87.

1877.

Francis Greenleaf Allinson, Ph. D., Associate Professor of Greek Literature and History, Brown University.—[1877–80].

Fabian Franklin, Ph. D., Assistant, Associate, Associate Professor, and Professor of Mathematics (J. H. U.), 1879–95; Editor of *The Baltimore News*.—[1877–79].

Lyman Beecher Hall, Ph. D., Professor of Chemistry, Haverford College.—[1877–79].

Allan Marquand, Ph. D., L. H. D., Professor of Archæology and the History of Art, Princeton College.—[1877–80].

1878.

Maurice Bloomfield, Ph. D., Professor of Sanskrit and Comparative Philology (J. H. U.).

Constantine Fahlberg, Ph. D., Chemist, Salbke-Westerhusen, Germany.—[1878–80].

Edwin Herbert Hall, Ph. D., Professor of Physics, Harvard University.—[1878–80].

Edward Coles Harding, A. M., Professor of Greek, University of Louisiana, 1879–80; Editor, Baltimore.

Rev. Charles Robert Hemphill, D. D., Professor of New Testament Exegesis, Louisville Presbyterian Theological Seminary; Clergyman, Louisville, Ky.

Isaac Ott, M. D., Professor of Physiology, Medico-Chirurgical College of Philadelphia.

Henry Sewall, Ph. D., M. D., Professor of Physiology, University of Denver.

Christian Sihler, Ph. D., M. D., Instructor and Acting Professor of Histology and Microscopy, Western Reserve University, 1889–94; Physician, Cleveland, Ohio.—[1877–79].

Washington Irving Stringham, Ph. D., Professor of Mathematics, Univ. of California.—[1878–80].

Charles Ambrose Van Velzer, S. B., Professor of Mathematics, Univ. of Wisconsin.—[1878–81].

Abram Van Epps Young, Ph. B., Professor of Chemistry, Northwestern Univ.—[1878–80].

1879.

Brown Ayres, S. B., Professor of Physics and Astronomy, Tulane University.

Louis Bevier, Ph. D., Professor of Greek, Rutgers College, N. J.—[1879–81].

William Burney, Ph. D., Professor of Chemistry, University of South Carolina.

Edward Mussey Hartwell, Ph. D., M. D., Director of Physical Training in the Boston Public Schools.—[1879–81].

*John Robin McDaniel Irby, Ph. D.

Mitsuru Kuhara, Ph. D., Professor of Chemistry, First Middle School, Tokio.—[1879–81].

*Oscar Howard Mitchell, Ph. D., Professor of Mathematics, Marietta College, 1882–89.—[1879–82].

Edward Leamington Nichols, Ph. D., Professor of Physics, Cornell University.

George Frederick Nicolassen, Ph. D., Professor of Greek and Latin, Southwestern Presbyterian University, Tenn.—[1879–81].

Waldo Selden Pratt, A. B., Professor of Ecclesiastical Music and Hymnology, Hartford (Conn.) Theological Seminary.

Robert Woodworth Prentiss, M. S., Professor of Mathematics and Astronomy, Rutgers College, N. J.—[1879–81].

William Thompson Sedgwick, Ph. D., Professor of Biology, Massachusetts Institute of Technology; Biologist, Mass. State Board of Health.

*Herman Voorhees, C. E. *Did not enter on the fellowship.*

Charles Otis Whitman, Ph. D., Professor of Zoölogy, University of Chicago. *Did not enter on the fellowship.*

Edmund Beecher Wilson, Ph. D., Professor of Invertebrate Zoölogy, Columbia College.—[1879–81].

1880.

James Wilson Bright, Ph. D., Professor of English Philology (J. H. U.).—[1880–82].

Benjamin Chapman Burt, A. B., Acting Professor of Philosophy and Pedagogy, University of Colorado, 1894–95.

Robert Dorsey Coale, Ph. D., Professor of Chemistry and Toxicology, and Dean of the Medical Faculty, University of Maryland.

Lawrence Bunting Fletcher, Ph. D., Instructor in Physics, Wesleyan University, 1882–83; Marlboro, N. Y.

*Spencer Hedden Freeman, A. B., Professor of Physics and Astronomy, Adelbert College, 1882–86.—[1880–82].

Kakichi Mitsukuri, Ph. D., Professor of Zoölogy, University of Tokio, Japan.

Bernard Francis O'Connor, Ph. D., Instructor and Adjunct Professor of Romance Languages, Columbia College, 1883–91; New York City.—[1880–82].

Chase Palmer, Ph. D., Professor of Chemistry, Missouri School of Mines, 1890–91; Louisville, Ky.—[1880–82].

Herbert Mills Perry, A. B., late Instructor, Cascadilla School, Ithaca, N. Y.—[1880–82].

William Lee Rowland, S. B., Chemist, Philadelphia, Pa. *Did not enter on the fellowship.*

Andreas Franz Wilhelm Schimper, Ph. D., Professor of Botany, University of Bonn.

Edward Henry Spieker, Ph. D., Associate Professor of Greek and Latin (J. H. U.).—[1880–82].

Morrison Isaac Swift, Ph. D., Instructor in Philosophy, Hobart College, 1882–84.—[1880–82].

*Arthur Wilson Wheeler, A. B.

1881.

William John Alexander, Ph. D., Professor of English, University of Toronto.—[1881–83].

Edward Sanford Burgess, A. B., Professor of Natural Science, Normal College, New York.

William James Comstock, Ph. B., Instructor in Organic Chemistry, Yale University, 1888–93; New Haven, Conn.

William Cathcart Day, Ph. D., Professor of Chemistry and Physics, Swarthmore College.—[1881–83].

Henry Herbert Donaldson, Ph. D., Professor of Comparative Neurology, University of Chicago.—[1881–83].

William Pitt Durfee, Ph. D., Professor of Mathematics, Hobart College, N. Y.—[1881–83].

George Stetson Ely, Ph. D., Examiner, U. S. Patent Office.—[1881–83].

Benjamin Ives Gilman, A. B., Curator, Museum of Fine Arts, Boston, Mass.

John Franklin Jameson, Ph. D., Professor of History, Brown University.

Charles Herschel Koyl, A. B., Instructor in Physics, Swarthmore College, 1887–88; New York City.—[1881–83].

Henry Leslie Osborn, Ph. D., Professor of Biology and Geology, Hamline University, Minn.

Henry Newlin Stokes, Ph. D., Assistant Professor of Chemistry, University of Chicago, 1892–94; U. S. Geological Survey, Washington.—[1881–83].

Benjamin Willis Wells, Ph. D., Professor of Modern Languages, University of the South. *Resigned, October*, 1881.

1882.

Charles John Bell, A. B., Professor of Chemistry, University of Minnesota. *Did not enter on the fellowship.*

James McKean Cattell, Ph. D., Professor of Experimental Psychology, Columbia College.

Ellery William Davis, Ph. D., Professor of Mathematics, Univ. of Nebraska.—[1882–84].

David Talbot Day, Ph. D., U. S. Geological Survey, Washington, D. C.—[1882–84].

Alfred Emerson, Ph. D., Associate Professor of Classical Archæology, Cornell Univ.—[1882–84].

William Scott Fleming, A. B., Professor of Greek and German, Davidson College, 1883–85; Wetumpka, Ala.

Arthur Lincoln Frothingham, Jr., Ph. D., Professor of Archæology and the History of Art, Princeton College.—[1882–85].

Henry Root Goodnow, A. B., New York City.

Elgin Ralston Lovell Gould, Ph. D., Lecturer on Social Economics (J. H. U.); Professor of Statistics, University of Chicago.—[1882–84].

Arthur Stafford Hathaway, S. B., Professor of Mathematics, Rose Polytechnic Institute.—[1882–84].

William Henry Howell, Ph. D., M. D., Professor of Physiology (J. H. U.).—[1882–84].

Edward Harrison Keiser, Ph. D., Professor of Chemistry, Bryn Mawr College.—[1882–84].

Arthur Lalanne Kimball, Ph. D., Professor of Physics, Amherst College.

Harry Fielding Reid, Ph. D., Professor of Mathematics and of Physics, Case School of Applied Science, 1886–94; Lecturer on Geology (J. H. U.). *Did not enter on the fellowship.*

1883.

William Muss Arnolt, Ph. D., Instructor in Patristic Greek, Univ. of Chicago.—[1883–85].

Gustav Bissing, Ph. D., Principal Examiner, Divison A, U. S. Patent Office.

*Adam Todd Bruce, Ph. D., Instructor in Osteology and Mammalian Anatomy (J. H. U.), 1886–87.

Archibald Lamont Daniels, D. Sc., Williams Professor of Mathematics and Physics, University of Vermont.

John Dewey, Ph. D., Professor of Philosophy, University of Chicago.

*James Reynolds Duggan, Ph. D., Professor of Chemistry, Wake Forest College, 1886–88.

Hans Carl Günther von Jagemann, Ph. D., Assistant Professor of German, Harvard University.

Gustav Adolph Liebig, Jr., Ph. D., Assistant in Electricity (J. H. U.), 1888–90; Tarrytown, N. Y.—[1883–85].

Charles William Emil Miller, Ph. D., Associate in Greek (J. H. U.).—[1883–85].

Charles Albert Perkins, Ph. D., Associate Professor of Physics and Electrical Engineering, University of Tennessee.

Lewis Tebbetts Stevens, M. D., Physician, St. Louis, Mo.

Lewis Webb Wilhelm, Ph. D., Mathematical Instructor, Baltimore.

1884.

Ethan Allen Andrews, Ph. D., Associate Professor of Biology (J. H. U.)—[1884–86].

Henry Crew, Ph. D., Professor of Physics, Northwestern University, Illinois.—[1884–86].

Homer Winthrop Hillyer, Ph. D., Assistant Professor of Organic Chemistry, University of Wisconsin.

Abel Henry Huizinga, Ph. D., Adjunct Professor of Old Testament Literature, &c., McCormick Theological Seminary, Chicago.—[1884–86].

Frederick Schiller Lee, Ph. D., Adjunct Professor of Physiology, Columbia College.

Charles Herbert Levermore, Ph. D., Principal of Adelphi Academy, Brooklyn, N. Y.

Henry Francis Nachtrieb, S. B., Professor of Biology, University of Minnesota.

Henry Barber Nixon, Ph.D., Professor of Mathematics, Pennsylvania College, Gettysburg.

William Noyes, Jr., M. D., Superintendent, Boston Insane Hospital, Mattapan, Mass.

Albert Gallatin Palmer, Ph. D., Assistant Professor of Chemistry, Swarthmore College, 1886–87; Chemist, Baltimore.

Ernest Mondell Pease, A. B., Professor of Latin, Leland Stanford Jr. University.—[1884–86].

Albert Harris Tolman, Ph. D., Assistant Professor of English Literature, University of Chicago. *Did not enter on the fellowship.*

Woodrow Wilson, Ph. D., LL. D., Professor of Jurisprudence and Political Economy, Princeton College; Lecturer on Constitutional Law, New York Law School; Lecturer on Local Government (J. H. U.).

1885.

Cyrus Adler, Ph. D., Librarian of the Smithsonian Institution; Professor of Oriental History and Archæology, Columbian University.—[1885–87].

*David Barcroft, Ph. D.

William Shirley Bayley, Ph. D., U. S. Geological Survey; Professor of Geology and Mineralogy, Colby University, Me.—[March, 1885–June, 1886].

Louis Bell, Ph. D., Professor of Physics and Applied Electricity, Purdue University, Ind., 1888–90; Chief Engineer, General Electric Company, Chicago, Ill.—[1885–87].

William Henry Burnham, Ph. D., Instructor in Pedagogy, Clark University.

Francis Albert Christie, A. B., Professor of Church History, Theological School, Meadville, Pa.—[1885–87].

Davis Rich Dewey, Ph. D., Professor of Economics and Statistics, Massachusetts Institute of Technology; Lecturer on Social Economics (J. H. U.).

Albert E. Egge, Ph. D., Instructor in English, Iowa State University.

William Henry Emerson, Ph. D., Professor of Chemistry, Georgia School of Technology.

John Charles Fields, Ph. D., Professor of Mathematics, Allegheny College, Pa.

Joseph Jastrow, Ph. D., Professor of Experimental and Comparative Psychology, University of Wisconsin.

George Theophilus Kemp, Ph. D., M. D., Associate Director, Department of Physiology, etc., Hoagland Laboratory, Brooklyn, N. Y., 1887–93; Fellow by Courtesy (J. H. U.).

Marion Dexter Learned, Ph. D., Professor of German, University of Pennsylvania.

Gonzalez Lodge, Ph. D., Professor of Latin, Bryn Mawr College.

Arthur McDonald, A. B., Bureau of Education, Washington, D. C. *Did not enter on the fellowship.*

Charles Skeele Palmer, Ph. D., Professor of Chemistry, University of Colorado.

George Thomas White Patrick, Ph. D., Professor of Philosophy, Iowa State University. *Reappointed* 1887, *but resigned.*

Moses Slaughter, Ph. D., Professor of Latin, Iowa College.

Charles Whetham, A. B., President of Whetham College, Vancouver, B. C., 1890–93; Toronto, Ont.

Charles Baker Wright, A. B., Professor of English Literature and Rhetoric, Middlebury College, Vt. *Did not enter on the fellowship.*

1886.

Edgar Pierce Allen, A. B., Attorney at Law, Ocala, Fla.—[1886–88].

John Pendleton Campbell, Ph. D., Professor of Biology, University of Georgia.

Henry Clarke, A. B., Classical Instructor, London, England.

Herbert Charles Elmer, Ph. D., Assistant Professor of Latin, Cornell University.

Henry Brayton Gardner, Ph. D., Associate Professor of Political Economy, Brown Univ.

Milton Haight, A. B., Professor of English and Mathematics, Sapporo Agricultural College, Japan, 1887–93; Instructor, Collegiate Institute, Strathroy, Canada.

John Leslie Hall, Ph. D., Professor of English and History, William and Mary College, Va.

Charles Willard Hayes, Ph. D., U. S. Geological Survey, Washington.

George Benjamin Hussey, Ph. D., Docent, University of Chicago.

James Hervey Hyslop, Ph. D., Professor of Logic and Ethics, Columbia College.

Andrew Cowper Lawson, Ph. D., Assistant Professor of Mineralogy and Geology, University of California.

Franklin Paine Mall, M. D., Professor of Anatomy (J. H. U.).—[1886–88].
Yujiro Motora, Ph. D., Professor of Psychology, etc., University of Tokio, Japan.
Julius Nelson, Ph. D., Professor of Biology, Rutgers College.
William Ridgely Orndorff, Ph. D., Assistant Professor of Chemistry, Cornell University.
Daniel Richard Randall, Ph. D., Attorney at Law, Annapolis, Md.
Henry Dallas Thompson, D. Sc., Ph. D., Assistant Professor of Mathematics, Princeton.
Edward Burr Van Vleck, Ph. D., Associate Professor of Mathematics, Wesleyan University, Conn.
Amos Griswold Warner, Ph. D., Professor of Economics, Leland Stanford Jr. University.
John Roaf Wightman, Ph. D., Professor of Romance Languages, Oberlin College.

1887.

Joseph Sweetman Ames, Ph. D., Associate Professor of Physics (J. H. U.).
Philip Wheelock Ayres, Ph. D., Secretary, Organized Charities, Chicago, Ill.
William Snyder Eichelberger, Ph. D., Instructor in Mathematics and Assistant in Astronomy, Wesleyan University, Conn.
Henry Rushton Fairclough, A. M., Associate Professor of Greek and Latin, Leland Stanford Jr. University. *Did not enter on the fellowship.*
*William Curns Lawrence Gorton, Ph. D., Associate Professor and Professor of Mathematics and Astronomy, Woman's College of Baltimore, 1888–94.
William Herbert Hobbs, Ph. D., Assistant Professor of Mineralogy and Metallurgy, University of Wisconsin.
Joseph Hoeing Kastle, Ph. D., Professor of Chemistry, Kentucky State College.
Felix Lengfeld, Ph. D., Assistant Professor of Chemistry, University of Chicago.
Archibald MacMechan, Ph. D., Professor of the English Language and Literature, Dalhousie University, Nova Scotia.
Herbert William Magoun, Ph. D., Acting Professor of Greek and of Latin, Oberlin, 1892–95.
*Thomas McCabe, Ph. D., Associate in Romance Languages, Bryn Mawr College, 1890–91.
John Leverett Moore, Ph. D., Professor of Latin, Vassar College.
Augustus Taber Murray, Ph. D., Professor of Greek, Leland Stanford Jr. University.
Edmund Clark Sanford, Ph. D., Assistant Professor of Psychology, Clark University.
Charles Lee Smith, Ph. D., Professor of History, William Jewell College, Mo.
Arthur Clarence Wightman, Ph. D., Adjunct Professor of Biology and Physics, Randolph Macon College.
Henry Van Peters Wilson, Ph. D., Professor of Biology, University of North Carolina.

1888.

Charles McLean Andrews, Ph. D., Associate Professor of History, Bryn Mawr College.
Frank Wilson Blackmar, Ph. D., Professor of History and Sociology, University of Kansas.
Charles Augustus Borst, A. B., Assistant in Astronomy (J. H. U.), 1889–92.
William Merriam Burton, Ph. D., Chemist, Standard Oil Company, Whiting, Ind.
Morgan Callaway, Jr., Ph. D., Associate Professor of English, University of Texas.
Charles Hiram Chapman, Ph. D., President of the University of Oregon.
Edwin Whitfield Fay, Ph. D., Professor of Latin, Washington and Lee Univ.—[1888–90].
Adam Capen Gill, Ph. D., Assistant Professor of Mineralogy, etc., Cornell University.
Joseph Edward Harry, Ph. D., Professor of Greek and German, Georgetown College, Ky.
James Taft Hatfield, Ph. D., Professor of German, Northwestern University, Ill.
George Allison Hench, Ph. D., Assistant Professor of German, University of Michigan.
Clifton Fremont Hodge, Ph. D., Assistant Professor of Physiology and Neurology, Clark University.
Cary Talcott Hutchinson, Ph. D., Electrician, New York City.
Alvin Frank Linn, Ph. D., Professor of Chemistry and Mineralogy, Wittenberg College, O. *Did not enter on the fellowship.*
Thomas Logie, Ph. D., Associate Professor of Romance Languages, Rutgers College.
Alfred Edward Thayer, M. D., Physician, New York City.

*James Starr Trueman, A. B., Professor of Greek and Latin, Allegheny College, 1889–92.
Shozaburo Watase, Ph. D., Assistant Professor of Cellular Biology, University of Chicago.

1889.

Edward Carey Applegarth, Ph. D., M. D., Physician, Baltimore.
Arthur George Blachstein, A. B., M. D., St. Petersburg, Russia.
Rudolf John Julius de Roode, Jr., Ph. D., Analytical Chemist, New York City.
George Peter Dreyer, Ph. D., Associate in Biology (J. H. U.).
Hermann Louis Ebeling, Ph. D., Professor of Greek, Miami University.
Charles Jaques Goodwin, Ph. D., Tutor in Greek, Wesleyan University, Conn., 1891–95.
Christopher Johnston, Jr., Ph. D., Associate in Semitic Languages (J. H. U.).—[1889–91].
Hiram Benjamin Loomis, Ph. D., Assistant Professor of Physics, Northwestern Univ.
John Hanson Thomas McPherson, Ph. D., Professor of History, University of Georgia.
Thomas Hunt Morgan, Ph. D., Professor of Biology, Bryn Mawr College.
Daniel Alexander Murray, Ph. D., Instructor in Mathematics, Cornell University.
Charles Lane Poor, Ph. D., Associate Professor of Astronomy (J. H. U.).
George Mann Richardson, Ph. D., Professor of Organic Chemistry, Leland Stanford Jr. University.
John Cunningham Robertson, Ph. D., Professor of Greek, St. Stephen's College, N. Y.
Charles Hunter Ross, Ph. D., Adjunct Professor of Modern Languages, Alabama Polytechnic Institute.
Joseph Samuel Shefloe, Ph. D., Professor of Romance Languages, Woman's College of Baltimore.
Robert Benson Steele, Ph. D.,, Professor of Latin, Illinois Wesleyan University.
Bert John Vos, Ph. D., Associate in German (J. H. U.).—[1889–91].
James Albert Woodburn, Ph. D., Professor of American History, Indiana University.

1890.

William Wilson Baden, LL. B., Ph. D., Professor of Greek, Central Univ., Ky.—[1890–92.]
Robert Payne Bigelow, Ph. D., Instructor in Biology, Mass. Institute of Technology.
Edwin Grant Conklin, Ph. D., Professor of Comparative Embryology, Univ. of Pennsylvania.
Rev. William Levering Devries, B. D., Ph. D., Clergyman, Alberton, Md.
George Houghton Gilman, A. B., LL. B., Attorney at Law, New York City. *Did not enter on the fellowship.*
Thomas Perrin Harrison, Ph. D., Professor of English, Davidson College.
Charles Rollin Keyes, Ph. D., State Geologist, Jefferson City, Mo.
Edwin Seelye Lewis, Ph. D., Assistant Professor of Romance Languages, Princeton College.
Arthur Stanley Mackenzie, Ph. D., Associate Professor of Physics, Byrn Mawr College.
Henry Parker Manning, Ph. D., Assistant Professor of Pure Mathematics, Brown Univ.
Wilfred Pirt Mustard, Ph. D., Professor of Latin, Haverford College.
Barker Newhall, Ph. D., Instructor in Greek, Brown University, 1892–95; Fellow by Courtesy (J. H. U.).
Edward Bennett Rosa, Ph. D., Professor of Physics, Wesleyan University, Conn.
Charles Edward Saunders, Ph. D., Professor of Chemistry, Central University, Ky., 1891–93; Ottawa, Canada.
Bernard Christian Steiner, LL. B., Ph. D., Librarian, Enoch Pratt Free Public Library; Associate in History (J. H. U.).
John White, Jr., Ph. D., Instructor in Chemistry, University of Nebraska.
Westel Woodbury Willoughby, Ph. D., Attorney at Law, Washington, D. C.; Reader in Political Science (J. H. U.).

1891.

Edward Ambrose Bechtel, A. B., Instructor in Latin, Northwestern University. *Did not enter on the fellowship.*
Julius Blume, Instructor in German, Baltimore.

Albert Bernhardt Faust, Ph. D., Instructor in German (J. H. U.).
Simon Flexner, M. D., Associate Professor of Pathology (J. H. U.).
Ulysses Sherman Grant, Ph. D., Assistant State Geologist, Minneapolis, Minn.
William Asbury Harris, Ph. D., Professor of Greek, Baylor University, Texas.
Harry Clary Jones, Ph. D., Instructor in Physical Chemistry (J. H. U.).
James Lawrence Kellogg, Ph. D., Professor of Biology, Olivet College.
Elmer Peter Kohler, Ph. D., Associate in Chemistry, Bryn Mawr College.
*Paul Erasmus Lauer, Ph. D., Assistant Superintendent of Schools, Cleveland, O., 1892–93.
David Judson Lingle, Ph. D., Instructor in Physiology, University of Chicago.
John Hanson Thomas Main, Ph. D., Professor of Greek, Iowa College.
Frank Jewett Mather, Jr., Ph. D., Instructor in English, Williams College.
Michael Andrew Mikkelsen, Ph. D., Montclair, N. J.
John Dyneley Prince, Ph. D., Professor of Semitic Languages, University of the City of New York.
Brantz Mayer Roszel, A. B., Fellow by Courtesy (J. H. U.).
George Owen Squier, Ph. D., First Lieut., U. S. A.; Artillery School, Fortress Monroe, Va.
Sidney Grant Stacey, A. B., Instructor in Latin, Iowa College, 1893–94; Student in Germany.
Joseph Moody Willard, A. B., Professor of Mathematics, Pennsylvania State College.

1892.

Burleigh Smart Annis, A. B., Instructor in Mathematics, Northwestern University.
Lewellys Franklin Barker, M. B., Associate in Anatomy (J. H. U.).—[1892–94].
Melvin Brandow, A. B., Assistant Librarian (J. H. U.).
Alexander Mitchell Carroll, Ph. D., Professor of Greek, Richmond College, Va.
Harry Max Ferren, A. B., Instructor in German, Allegheny (Pa.) High School.
David Hull Holmes, Ph. D., Fellow by Courtesy (J. H. U.); Associate Professor of Latin, University of Kansas.
Arthur John Hopkins, Ph. D., Assistant Professor of Chemistry, Amherst College.
Theodore Hough, Ph. D., Assistant Professor of Physiology, Mass. Inst. of Technology.
James Alton James, Ph. D., Professor of History, Cornell College, Iowa.
Francis Plaisted King, A. B., Assistant State Geologist, Atlanta, Ga.
Emory Bair Lease, Ph. D., Professor of Latin, Allegheny College, Pa.
Edward Payson Manning, Ph. D., Instructor in Mathematics, St. Lawrence Univ., N. Y.
Louis Emil Menger, Ph. D., Associate in Romance Languages (J. H. U.).
*Lucius Salisbury Merriam, Ph.D., Instructor in Political Economy, Cornell Univ., 1893–94.
Mayo Maynard Metcalf, Ph. D., Associate Professor of Biology, Woman's College of Baltimore.
René de Poyen-Bellisle, Ph. D., Instructor in Romance Philology, University of Chicago.
Arthur Percy Saunders, Ph. D., Instructor in Chemistry, University of Wisconsin.
Daniel Gurden Stevens, Jr., Ph. D., Student, Crozer Theological Seminary.—[1892–94].
Frederick Tupper, Jr., Ph. D., Professor of English, University of Vermont.
Frank Alfred Wolff, Jr., Ph. D., Chemist, Department of Agriculture, Washington.

1893.

Thomas Stockham Baker, Ph. D., Assistant in German (J. H. U.).
John Spencer Bassett, Ph. D., Professor of History, Trinity College, N. C.
George Melville Bolling, A. B., Fellow by Courtesy (J. H. U.); Instructor in Sanskrit and Comparative Philology, Catholic Univ.
Abraham Cohen, Ph. D., Instructor in Mathematics (J. H. U.).
Ervin Sidney Ferry, S. B., New York City.
William Francis Gallaway, Ph. D., Fellow by Courtesy (J. H. U.).
Ross Granville Harrison, Ph. D., Lecturer in Morphology, Bryn Mawr College, 1894–95.
Bert Holmes Hite, M. S., Chemist, Agricultural Experiment Station of W. Va.—[1893–95].
Samuel Verplanck Hoffman, M. E., Fellow by Courtesy (J. H. U.).

Jacob H. Hollander, Ph. D., Instructor in Economics (J. H. U.).
Charles William Leverett Johnson, A. B., Fellow by Courtesy (J. H. U.).
George Wesley Johnston, Ph. D., Acting Assistant Professor of Latin, Cornell University.
George Charles Keidel, Ph. D., Assistant in Romance Languages (J. H. U.).—[1893–95].
Edward Bennett Mathews, Ph. D., Associate in Mineralogy (J. H. U.).
Edwin Fitch Northrup, Electrical Engineer, Park City, Utah.—[1893–95].
Alfred William Stratton, Ph. D., Docent in Sanskrit, University of Chicago.—[1893–95].
Frederick Henry Sykes, Ph. D., Professor of English, Western University, London, Ont.
George Francis Weida, Ph. D., Professor of Chemistry, Blackburn University, Ill.

1894.

Arthur Fisher Bentley, Ph. D., Docent in Sociology, University of Chicago.
Samuel Walker Beyer, Ph. D., Associate Professor of Geology, Iowa Agricultural College.
Clarence Griffin Child, Ph. D., Assistant Editor, Worcester's Dictionary; University Extension Lecturer, Philadelphia.
Frank Hollinger Cluts, A. B., Fellow (J. H. U.).—[1894–96].
Henry Stewart Gane, Ph. D., U. S. Geological Survey, Washington.
William August Haussmann, Ph. D., Instructor in German, Southern Female College, Petersburg, Va.
Reid Hunt, Ph. D., Fellow (J. H. U.).—[1894–96].
Thomas Franklin Kane, Ph. D., Professor of Latin, Olivet College.
William Hamilton Kirk, Ph. D., Instructor in Greek, Vanderbilt University.
Henry McElderry Knower, A. B., Bruce Fellow (J. H. U.).
George Lefevre, A. B., Bruce Fellow (J. H. U.).
Caspar Levias, A. B., Professor of Exegesis and Hebrew Grammar, Hebrew Union College, Cincinnati. *Reappointed* 1895, *but resigned.*
William Henry Maltbie, Ph. D., Associate Professor of Mathematics, Woman's College of Baltimore.
Thomas Francis Moran, Ph. D., Professor of History and Economics, Purdue University.
Louis Trenchard More, Ph. D., Instructor in Physics, Worcester Polytechnic Institute.
James Flack Norris, Ph. D., Assistant in Chemistry, Mass. Institute of Technology.
Herbert Dodge Pease, M. B., Bacteriologist, Board of Health, Philadelphia.

The list of the present holders of Fellowships is given on page 11.
The whole number of Fellows appointed in twenty years is 322.

8. Doctors of Philosophy.

(When the institution is not named, the Johns Hopkins University is to be understood. (F) indicates that the person has held a Fellowship here. *—Died.)

1878.

Henry Carter Adams, (F), A. B., Iowa, 1874, Instructor, 1879–81, Lecturer, 1892–94, Lecturer and Associate Professor, Cornell, 1879–87.—Professor of Political Economy, etc., Univ. of Michigan; Statistician, Interstate Commerce Commission.

Thomas Craig, (F), C. E., Lafayette, 1875, U. S. Coast Survey, 1879–81, Instructor, Associate, and Associate Professor, 1879–92.—Professor of Pure Mathematics.

Josiah Royce, (F), A. B., Univ. of Cal., 1875, Assistant Professor, Univ. of Cal., 1878–82.—Professor of Philosophy, Harvard.

Ernest Gottlieb Sihler, (F), Concordia, 1869, Professor, Concordia Coll., Milwaukee, 1891–92.—Professor of Latin, Univ. of the City of New York. (4)

1879.

Maurice Bloomfield, (F), A. M., Furman, 1877, Associate and Associate Professor, 1881–91.—Professor of Sanskrit and Comparative Philology.

Samuel Fessenden Clarke, (F), Ph. B., Yale, 1878, Assistant, 1879–81.—Professor of Natural History, Williams College.

George Bruce Halsted, (F), A. B., Princeton, 1875, Tutor and Instructor, Princeton, 1878–84.—Professor of Mathematics, Univ. of Texas.

Edward Hart, (F), S. B., Lafayette, 1874.—Professor of Analytical Chemistry, Lafayette College.

William White Jacques, (F), S. B., Mass. Inst. of Tech., 1876, and Lecturer in the Inst., 1885–91.—Electrician, Boston, Mass.

Henry Sewall, (F), S. B., Wesleyan, 1876, Hon. M. D., Univ. of Mich., 1888, M. D., Univ. of Colorado, 1889, Associate in Biology, 1880–82, Professor, Univ. of Mich., 1882–89.—Professor of Physiology, Univ. of Denver. (6)

1880.

Francis Greenleaf Allinson, (F), A. B., Haverford, 1876, A. B., Harvard, 1877, Assistant Professor, Haverford, 1880–82, Associate Professor, Williams, 1892–95.—Associate Professor of Greek Literature, Brown Univ.

Fabian Franklin, (F), Ph. B., Columbian, 1869, Assistant, Associate, Associate Professor, and Professor of Mathematics, 1879–95.—Editor of *The Baltimore News.*

Edwin Herbert Hall, (F), A. B., Bowdoin, 1875, Assistant, 1880–81, Instructor and Assistant Professor, Harvard, 1881–95.—Professor of Physics, Harvard Univ.

Allan Marquand, (F), A. B., Princeton, 1874.—Professor of Archæology and the History of Art, Princeton.

Washington Irving Stringham, (F), A. B., Harvard, 1877.—Professor of Mathematics, Univ. of California. (5)

1881.

Louis Bevier (F), A. B., Rutgers, 1878, Instructor and Adjunct Professor, Rutgers, 1881–92.—Professor of Greek, Rutgers.

Robert Dorsey Coale, (F), Assistant, 1881–83.—Professor of Chemistry and Toxicology and Dean of the Medical Faculty, Univ. of Maryland.

Edward Allen Fay, A. B., Univ. of Mich., 1862.—Vice-President and Professor of Languages, National Deaf-Mute College, Washington.

Lawrence Bunting Fletcher, (F), A. B., Columbia, 1877, Instructor in Physics, Wesleyan, 1882–83.—Marlboro, N. Y.

Samuel Garner, A. B., St. John's, 1871, Professor, Univ. of Indiana, 1881–87.—Professor of Modern Languages, U. S. Naval Academy.

Edward Mussey Hartwell, (F), A. B., Amherst, 1873, M. D., Miami Med. Coll., 1882, Instructor and Associate, 1883–91.—Director of Physical Training in the Boston Public Schools.

William Thomson Sedgwick, (F), Ph. B., Yale, 1877, Assistant and Associate, 1880–83.—Professor of Biology, Mass. Inst. of Tech.; Biologist, Mass. State Board of Health.

Christian Sihler, (F), Concordia, 1866, M. D., Univ. of Mich., 1871, Assistant, 1879–80, Instructor and Acting Professor, Western Reserve, 1889–94.—Physician, Cleveland, O.

Edmund Beecher Wilson, (F), Ph. B., Yale, 1878, Assistant, 1881–82, Lecturer, Williams, 1883–84, Associate Professor and Professor, Bryn Mawr, 1885–91.—Professor of Invertebrate Zoölogy, Columbia.

(9)

1882.

James Wilson Bright, (F), A. B., Lafayette, 1877, Assistant, 1882–83, Instructor, Associate, and Associate Professor, 1885–93, Instructor, Cornell, 1885.—Professor of English Philology.

John Franklin Jameson, (F), A. B., Amherst, 1879, Assistant and Associate, 1882–88, Lecturer, 1890–91.—Professor of History, Brown Univ.

Mitsuru Kuhara, (F), S. B., Univ. of Tokio, 1877, Lecturer, Univ. of Tokio, 1882–87.—Professor of Chemistry, First Middle School of Tokio, Japan.

Robert Wright Mahon, C. E., Lehigh, 1876, Tutor, Lafayette, 1882–83, Acting Professor, Rose Polytech. Inst., 1888–89.—Chemist, Baltimore.

*Oscar Howard Mitchell, (F), A. B., Marietta, 1875, Professor of Mathematics, Marietta Coll., 1882–89. **March* 29, 1889.

George Frederick Nicolassen, (F), A. B., Univ. of Virginia, 1879, Assistant, 1881–82.—Professor of Greek and Latin, Southwestern Presbyterian Univ., Tenn.

William Albert Noyes, A. B., Iowa, 1879, Instructor, Univ. of Minn., 1882–83, Professor, Univ. of Tenn., 1883–86.—Professor of Chemistry, Rose Polytechnic Inst.

Chase Palmer, (F), A. B., 1879, Assistant, Mass. Inst. of Tech., 1882–83, Professor, Mass. State Normal School, Salem, 1883–87, Assistant, Tufts Coll., 1887–88, Professor of Chemistry, Wabash Coll., 1888–90, and Missouri School of Mines, 1890–91.—Louisville, Ky.

Edward Henry Spieker, (F), A. B., 1879, Instructor and Associate, 1882–88.—Associate Professor of Greek and Latin.

(9)

1883.

William John Alexander, (F), A. B., Univ. of London, 1876, Professor, Dalhousie Univ., 1883–89.—Professor of English, Univ. of Toronto.

William Cathcart Day, (F), A. B., 1880, Professor, St. John's Coll., 1883–84, and Univ. of Nashville, 1884–87.—Professor of Chemistry, Swarthmore College.

William Pitt Durfee, (F), A. B., Univ. of Michigan, 1876.—Professor of Mathematics, Hobart College, N. Y.

Kakichi Mitsukuri, (F), Ph. B., Yale, 1879.—Professor of Zoölogy, Univ. of Tokio.

George Stetson Ely, (F), A. B., Amherst, 1878, Professor of Mathematics, Buchtel, 1883–84.—Examiner, U. S. Patent Office.

Bernard Francis O'Connor, (F), B. ès Lett., Univ. of France, 1874, Instructor and Adjunct Professor of Romance Languages, Columbia, 1883–91.—New York City.

(6)

1884.

Herbert William Conn, A. B., Boston Univ., 1881, Assistant, 1883–84, Associate Professor, Wesleyan Univ., 1884–88.—Professor of Biology, Wesleyan Univ., Conn.

Ellery William Davis, (F), S. B., Univ. of Wis., 1879, Professor, Florida Agric. Coll., 1884–88, and Univ. of S. C., 1888–93.—Professor of Mathematics, Univ. of Nebraska.

David Talbot Day, (F), A. B., 1881, Teacher, Balt., 1885–86.—U. S. Geol. Survey, Washington.

John Dewey, (F), A. B., Univ. of Vt., 1879, Instructor and Professor, Univ. of Mich., 1884–94.—Professor of Philosophy, Univ. of Chicago.

*James Reynolds Duggan, (F), A. B., Mercer, 1877, M. D., Jefferson Med. Coll., 1879, Professor of Chemistry, Wake Forest College, 1886–88. **January* 10, 1888.

William Henry Howell, (F), A. B., 1881, M. D., Univ. of Mich., 1890, Assistant, Associate, and Associate Professor, 1884–89, Lecturer and Professor, Univ. of Mich., 1889–92, Associate Professor, Harvard, 1892–93.—Professor of Physiology.

Hans Carl Günther von Jagemann, (F), Naumburg Gymnas., 1876, Professor, Earlham, 1884–85, and Indiana Univ., 1885–89.—Assistant Professor of German, Harvard.

Edward Harrison Keiser, (F), S. B., Swarthmore, 1880, Assistant, 1884–85.—Professor of Chemistry, Bryn Mawr College, Pa.

Arthur Lalanne Kimball, (F), A. B., Princeton, 1891, Associate and Associate Professor, 1884–91.—Professor of Physics, Amherst College.

Henry Leslie Osborn, (F), A. B., Wesleyan, Conn., 1878, Professor, Purdue Univ., 1884–87.—Professor of Biology and Geology, Hamline Univ., Minn.

Charles Albert Perkins, (F), A. B., Williams, 1879, Assistant, 1884–87, Associate, Bryn Mawr, 1887–91, Professor, Hampden Sidney, 1891–92.—Professor of Physics, etc., Univ. of Tenn.

Albert Shaw, A. B., Iowa, 1879, Reader, 1889-90, Lecturer, 1891-92.—American Editor, *The Review of Reviews*, New York.

Henry Newlin Stokes, (F), S. B., Haverford, 1879, Assistant Professor of Chemistry, Univ. of Chicago, 1893-94.—U. S. Geological Survey, Washington, D. C.

Louis Webb Wilhelm, (F), A. B., 1880.—Mathematical Instructor, Baltimore.

Arthur Yager, A. B., Georgetown, Ky., 1879.—Professor of History, Georgetown College, Ky. (15)

1885.

Edward Webster Bemis, A. B., Amherst, 1880, Instructor, Amherst, 1885-86, Adjunct Professor, Vanderbilt, 1886-92, Associate Professor, Univ. of Chicago, 1892-95.—Associate Editor, *Bibliotheca Sacra*, Oberlin, O.

Gustav Bissing, (F), A. B., 1882.—Principal Examiner, Division A, U. S. Patent Office.

Henry Herbert Donaldson, (F), A. B., Yale, 1879, Assistant, 1883-84, Instructor and Associate, 1885-89, Assistant Professor, Clark Univ., 1889-92.—Professor of Comparative Neurology, Univ. of Chicago.

Louis Duncan, U. S. Naval Academy, 1880, Associate, 1886-89.—Associate Professor of Electricity.

Homer Winthrop Hillyer, (F), S. B., Univ. of Wis., 1882, Instructor, Univ. of Wis., 1885-90.—Assistant Professor of Organic Chemistry, Univ. of Wisconsin.

Frederic Schiller Lee, (F), A. B., St. Lawrence Univ., 1878, Instructor, St. Lawrence, 1886-87, Associate, Bryn Mawr, 1887-91.—Adjunct Professor and Demonstrator of Physiology, Columbia College.

Gustav Adolph Liebig, Jr., (F), A. B., 1882, Assistant, 1888-90.—Tarrytown, N. Y.

James Playfair McMurrich, A. B., Toronto, 1879, Instructor, 1884-86, Professor, Haverford, 1886-89, Instructor, Clark Univ., 1889-91, Professor, Univ. of Cincinnati, 1891-94.—Professor of Anatomy, Univ. of Michigan.

Albert Gallatin Palmer, (F), A. B., 1882, Assistant and Assistant Professor, Swarthmore, 1885-87.—Chemist, Baltimore.

Harry Fielding Reid, (F), A. B., 1880, Assistant, 1882-84, Professor of Mathematics (1886-89) and of Physics, (1889-94), Case School.—Lecturer in Geology.

Henry Alford Short, A. B., Columbia, 1880, Tutor, Columbia, 1885-88.—New York.

Morrison Isaac Swift, (F), A. B., Williams, 1879, Instructor in Philosophy, Hobart College, 1882-84.

Henry Alfred Todd, A. B., Princeton, 1876, Instructor and Associate, 1883-91, Professor, Stanford Univ., 1891-93.—Professor of Romance Lang., Columbia. (13)

1886.

William Shirley Bayley, (F), A. B., 1883.—U. S. Geological Survey; Professor of Geology and Mineralogy, Colby Univ.

*Adam Todd Bruce, (F), A. B., Princeton, 1881, Instructor in Osteology, etc., 1886-87. **February* 9, 1887.

Davis Rich Dewey, (F), A. B., Univ. of Vt., 1879.—Instructor (1886-88) and (now) Professor of Economics, etc., Mass. Institute of Technology; Lecturer on Social Economics.

William Henry Emerson, (F), U. S. Naval Acad., 1880, Professor, S. C. Military Acad., 1886-88.—Professor of Chemistry, Georgia School of Technology, Atlanta.

Joseph Auguste Fontaine, College of Sion, Nancy, France, 1879, Instructor, Univ. of Neb., 1887-89, Professor, Univ. of Miss., 1889-91.—Professor of Romance Languages, Bryn Mawr.

Elgin Ralston Lovell Gould, (F), A. B., Victoria (Ont.), 1881, Instructor, Washington (D. C.) High School, 1884-87, Reader, 1887-89.—Professor of Statistics, University of Chicago; Lecturer in Social Economics.

William Penn Holcomb, B.L., Swarthmore, 1878, Professor of History, etc., Swarthmore, 1886-94.—Pearl River, N. Y.

Joseph Jastrow, (F), A. B., Univ. of Pa., 1882.—Professor of Experimental and Comparative Psychology, Univ. of Wisconsin.

George Theophilus Kemp, (F), A. B., 1883, M. D., Long Island Med. Coll., 1891, Demonstrator, Univ. of Pa., 1886-87, Associate and Associate Director, etc., Hoagland Lab., 1888-93.—Fellow by Courtesy.

Charles Herbert Levermore, (F), A. B., Yale, 1879, Instructor, Univ. of Cal., 1886-88, Professor of History, Mass. Inst. of Tech., 1888-93.—Principal, Adelphi Academy, Brooklyn.

Gonzalez Lodge, (F), A. B., 1883, Professor, Davidson Coll., 1886-88.—Professor of Latin, Bryn Mawr College.

Charles William Emil Miller, (F), A. B., 1882, Professor, Peoria (Ill.) High School, 1888–90, and Walther Coll., St. Louis, 1890–91.—Associate in Greek.

Henry Barber Nixon, (F), Univ. of N. C. 1878.—Professor of Mathematics, Pennsylvania College, Gettysburg.

Charles Skeele Palmer, (F), A. B., Amherst, 1879.—Professor of Chemistry, Univ. of Colorado.

Burr James Ramage, A. B., Newberry, 1880. —Professor of Common and Statute Law and Dean of the Law School, Univ. of the South.

Shosuke Sato, S. B., Sapporo Agric. Coll., 1880.—Acting Director and Professor of Agricultural Economics, Imperial College of Agriculture, Sapporo, Japan.

Woodrow Wilson, (F), A. B., Princeton, 1876, LL. D., Wake Forest, 1887, Associate and Associate Professor, Bryn Mawr, 1885–88, Professor, Wesleyan Univ., Conn., 1888–90.—Professor of Jurisprudence and Political Economy, Princeton; Lecturer in Constitutional Law, New York Law School; Lecturer in Local Government. (17)

1887.

Cyrus Adler, (F), A. B., Univ. of Pa., 1883, Instructor, 1887–90, Associate, 1890–93.—Librarian of the Smithsonian Institution; Professor of Oriental History and Archæology, Columbian Univ.

Ethan Allen Andrews, (F), Ph. B., Yale, 1881, Instructor and Associate, 1887–92.—Associate Professor of Biology.

Rev. Albert Clayton Applegarth, A. B., 1884.—Clergyman, Chester, Pa.

*David Barcroft, (F), Ph. B., Univ. of California, 1882. **August* 2, 1894.

Henry Gustav Beyer, M. D., Bellevue Hospital Med. Coll., 1876, M. R. C. S. (London).—Passed Assistant Surgeon, U. S. N.; Director of Physical Training, U. S. Naval Academy.

Richard Newman Brackett, A. B., Davidson, 1883.—Associate Professor of Chemistry, Clemson Agricultural College, S. C.

Henry Crew, (F), A. B., Princeton, 1882, Assistant, 1887–88, Instructor, Haverford, 1888–91.—Professor of Physics, Northwestern Univ.

Albert E. Egge, (F), A. B., Luther Coll., 1879, Professor, St. Olaf Coll., 1887–92.—Instructor in English, Iowa State University.

John Charles Fields, (F), A. B., Toronto, 1884.—Professor of Mathematics, Allegheny College, Pa.

Andrew Fossum, A. B., Luther, 1882.—Professor of Greek, St. Olaf College, Minn.

Richmond Harding, A. B., Davidson, 1880. —Professor of Greek, Davidson College.

Charles Willard Hayes, (F), A. B., Oberlin, 1883.—U. S. Geol. Survey, Washington.

William Adam Hedrick, A. M., Columbian, 1884.—Instructor in the High School, Washington, D. C.

Frank Gaylor Hubbard, A. B., Williams, 1880, Instructor, Smith Coll., 1887–88, and Univ. of Cal., 1888–92.—Assistant Professor of English Literature, Univ. of Wis.

George Benjamin Hussey, (F), A. B., Columbia, 1884, Fellow of Princeton, 1888–90, Instructor and Associate Professor, Univ. of Neb., 1891–94.—Docent, Univ. of Chicago.

James Hervey Hyslop, (F), A. B., Wooster, 1877, Instructor, Bucknell, 1888–89.—Professor of Logic and Ethics, Columbia.

Marion Dexter Learned, (F), A. B., Dickinson, 1880, Instructor, Associate, and Associate Professor, 1886–95.—Professor of German, Univ. of Pa.

William Ridgely Orndorff, (F), A. B., 1884. —Assistant Professor of Organic Chemistry, Cornell Univ.

Daniel Richard Randall, (F), A. B., St. John's, 1883.—Attorney at Law, Annapolis.

Frederick Morris Warren, A. B., Amherst, 1880, Instructor and Associate, 1886–91. —Professor of Romance Lang., Adelbert; Lecturer in French Literature. (20)

1888.

William Muss Arnolt, (F), B. D., New Brunswick Theol. Sem., 1882, Professor, New Windsor Coll., 1890–91, Instructor, 1891–93, Assistant Professor, Univ. of Mich., 1893–94.—Instructor in Biblical and Patristic Greek, Univ. of Chicago.

Philip Wheelock Ayres, (F), Ph. B., Cornell, 1884.—Secretary, Organized Charities, Chicago, Ill.

Louis Bell, (F), A. B., Dartmouth, 1884, Professor of Physics, etc., Purdue Univ., 1888–89.—Chief Engineer, General Electric Company, Chicago, Ill.

Benjamin Lester Bowen, A. B., Rochester, 1881, Professor, Bowdoin, 1888–89.—Professor of Romance Lang., Ohio State Univ.

William Henry Burnham, (F), A. B., Harvard, 1882, Instructor, 1888–89.—Instructor in Pedagogy, Clark Univ.

Richard Eugene Burton, A. B., Trinity (Conn.), 1883.—Editor, Hartford, Conn.

John Pendleton Campbell, (F), A. B., 1885.—Professor of Biology, Univ. of Georgia.

Herbert Charles Elmer, (F), A. B., Cornell, 1883.—Assistant Professor of Latin, Cornell Univ.

Robert Orlando Graham, A. B., Amherst, 1877.—Professor of Chemistry and Geology, Illinois Wesleyan Univ.

Erasmus Haworth, S. B., Kansas State Univ., 1881, Professor in Oskaloosa Coll., 1882–92.—Associate Professor of Organic Geology, Kansas State Univ.

Francis Hobart Herrick, A. B., Dartmouth, 1881.—Professor of Biology, Adelbert.

William Herbert Hobbs, (F), S. B., Worcester Polytechnic, 1883.—Assistant Professor of Mineralogy and Petrology, Univ. of Wisconsin.

Joseph Hoeing Kastle, (F), S. B., Kentucky State Coll., 1884.—Professor of Chemistry, Kentucky State College.

Andrew Cowper Lawson, (F), A. B., Toronto, 1883.—Assistant Professor of Mineralogy and Geology, Univ. of California.

Felix Lengfeld, (F), Professor, S. Dakota School of Mines, 1890–91, Instructor, Univ. of California, 1891–92.—Assistant Professor of Chemistry, Univ. of Chicago.

Archibald Byron Macallum, A. B., Toronto, 1880.—Associate Professor of Physiology, Univ. of Toronto.

John Ernst Matzke, A. B., Hope Coll., 1882, Professor, Bowdoin Coll., 1889–90, and Indiana Univ., 1890–91, Associate, 1891–93.—Professor of Romanic Languages, Leland Stanford Jr. Univ.

*Thomas McCabe, (F), A. B., 1886, Instructor, Univ. of Michigan, 1888–89, Professor, Indiana Univ., 1889–90, Associate in Romance Languages, Bryn Mawr College, 1890–91. **February* 22, 1891.

Yujiro Motora (F), Doshisha Kioto, Japan, 1879.—Professor of Psychology, etc., Univ. of Tokio.

Julius Nelson, (F), S. B., Univ. of Wisconsin, 1881.—Professor of Biology, Rutgers Coll.

George Thomas White Patrick, (F), A. B., Iowa State Univ., 1878, B. D., Yale, 1885.—Professor of Philosophy, Iowa State Univ.

Edmund Clark Sanford, (F), A. B., Univ. of Cal., 1883, Instructor, 1888–89.—Assistant Professor of Psychology, Clark Univ.

Henry Taber, Ph. B., Yale, 1882, Assistant, 1888–89.—Assistant Professor of Mathematics, Clark Univ.

Amos Griswold Warner, (F), B. L., Univ. of Neb., 1885, General Agent, Charity Organization Society, Baltimore, 1887–89, Professor, Univ. of Neb., 1889–91, General Superintendent of Charities in the District of Columbia, 1891–93, Lecturer, 1892–93.—Professor of Economics, Leland Stanford Jr. Univ.

John Roaf Wightman, (F), A. B., Toronto, 1871, Professor, Iowa Coll., 1889–91, Associate Professor, Univ. of Nebraska, 1891–93.—Professor of Romance Lang., Oberlin.

Henry Van Peters Wilson, (F), A. B., 1883, Bruce Fellow, 1888–89.—Professor of Biology, Univ. of North Carolina.

Thomas Kimber Worthington, A. B., Haverford, 1883, LL. B., Univ. of Md., 1890.—Attorney at Law, Baltimore. (27)

1889.

Charles McLean Andrews, (F), A. B., Trinity (Conn.), 1884.—Associate Professor of History, Bryn Mawr College.

Frank Wilson Blackmar, (F), Ph. B., Univ. of the Pacific, 1881.—Professor of History and Sociology, Univ. of Kansas.

Jeffrey Richardson Brackett, A. B., Harvard, 1883.—Baltimore.

William Merriam Burton, (F), A. B., Adelbert, 1886.—Chemist, Standard Oil Company, Whiting, Ind.

Morgan Callaway, Jr., (F), A. B., Emory (Ga.), 1881, Professor, Southwestern Univ., 1889–90.—Associate Professor of English, Univ. of Texas.

Alfred Robert Louis Dohme, A. B., 1886.—Chemist, Baltimore.

*William Curns Lawrence Gorton, (F), A. B., 1886, Associate Professor and Professor of Mathematics, Woman's College of Baltimore, 1888–94. **November* 8, 1894.

Joseph Edward Harry, (F), A. B. 1886.—Professor of Greek and German, Georgetown College, Ky.

George Allison Hench, (F), A. B., Lafayette, 1885.—Assistant Professor of German, Univ. of Michigan.

Clifton Fremont Hodge, (F), A. B., Ripon, 1882, Instructor, Univ. of Wis., 1891–92.—Assistant Professor of Physiology and Neurology, Clark Univ.

Cary Talcott Hutchinson, (F), Ph. B., Washington Univ., 1886.—Electrician, New York City.

James Thomas Lees, A. B., Adelbert, 1886. —Professor of Greek, University of Nebraska.

Archibald MacMechan, (F), A. B. ,Toronto, 1884.—Professor of English, Dalhousie Univ., Nova Scotia.

Charles William Moulton, A. B., Univ. of Minn., 1885.—Professor of Chemistry, Vassar College.

Albion Woodbury Small, A. B., Colby, 1876, Reader, 1888–89, President of Colby Univ., 1889–92.—Professor of Social Science, Univ. of Chicago.

Charles Lee Smith, (F), S. B., Wake Forest, 1884, Instructor, 1889–91, General Secretary, Charity Organization Society of Baltimore, 1889–91.—Professor of History, William Jewell College, Mo.

Kirby Flower Smith, A. B., Univ. of Vt., 1884, Instructor and Associate, 1889–93.—Associate Professor of Latin.

Rev. Lemon Leander Uhl, A. B., Wittenberg (Ohio), 1881, and D. D., 1893.—Missionary in British India.

Arthur Clarence Wightman, (F), A. B., Wofford, 1879, Demonstrator, 1889–90, Professor in Md. Agric. Coll., 1890–91.—Adjunct Professor of Biology and Physics, Randolph Macon College.

William Klapp Williams, A. B., 1886.—Boston, Mass. (20)

1890.

Joseph Sweetman Ames, (F), A. B., 1886, Assistant and Associate, 1889–93.—Associate Professor of Physics.

Edward Carey Applegarth, (F), A. B., 1887, M. D., Coll. of Phys. and Surg., Balt., 1892.—Physician, Baltimore.

Charles Cotton Blackshear, A. B., Mercer, 1881, Instructor, Bryn Mawr, 1890–91.—Associate Professor of Chemistry, Woman's College of Baltimore.

Charles Hiram Chapman, (F), A. B., 1888, Instructor and Associate, 1889–92.—President, Univ. of Oregon.

Rudolf John Julius de Roode, Jr., (F), S. B., Kentucky State Coll., 1885.—Analytical Chemist, New York City.

George Peter Dreyer, (F), A. B., 1887, Demonstrator, 1890–92.—Associate in Biology.

Edwin Whitfield Fay, (F), A. M., Southwestern Presbyterian Univ., 1883, Instructor, Univ. of Mich., 1890–91, Acting Professor, Univ. of Texas, 1892–93.—Professor of Latin, Washington and Lee.

Henry Torsey Fernald, S. B., Maine State Coll., 1885.—Professor of Zoölogy, Pennsylvania State College.

Henry Brayton Gardner, (F), A. B., Brown, 1884.—Associate Professor of Political Economy, Brown Univ.

Charles Jaques Goodwin, (F), A. B., Bowdoin, 1887, Professor, Cornell Coll., 1890–92, Tutor, Wesleyan Univ., 1892–95.

Charles Homer Haskins, A. B., 1887, Instructor, 1889–90.—Professor of Institutional History, Univ. of Wisconsin.

James Taft Hatfield, (F), A. B., Northwestern Univ., 1883.—Professor of German, Northwestern Univ.

John Cohn Hemmeter, M. D., Univ. of Md., 1883.—Physician, Baltimore.

Charles Holmes Herty, Ph. B., Univ. of Georgia, 1886.—Adjunct Professor of Chemistry, Univ. of Georgia.

Jesse Herman Holmes, A. B., Univ. of Neb., 1884.—Instructor in Chemistry and Physics, Newtown, Pa.

Abel Henry Huizinga, (F), A. B., Hope Coll., 1880.—Adjunct Professor of Old Testament Literature, etc., McCormick Theol. Seminary, Chicago.

Toyokichi Iyenaga, Ph. B., Oberlin, 1887.—Professor of Political Science, Semmo Gakko, Tokio.

Thomas Logie, (F), A. B., Toronto, 1887, Assistant Professor, Williams Coll., 1890–93.—Associate Professor of Romance Languages, Rutgers College.

Hiram Benjamin Loomis, (F), A. B., Trinity (Conn.), 1885, Instructor, Univ. of Wis., 1890–93.—Assistant Professor of Physics, Northwestern Univ.

Herbert William Magoun, (F), A. B., Iowa, 1879, Acting Professor, Colorado Coll., 1890–91, Acting Professor, Oberlin, 1892–95.—Oberlin, O.

John Hanson Thomas McPherson, (F), A. B., 1886, Instructor, Univ. of Mich., 1890–91.—Professor of History, Univ. of Georgia.

Wilmot Vernon Metcalf, A. B., Oberlin, 1883.—Professor of Chemistry and Physics, Carleton College, Minn.

Thomas Hunt Morgan, (F), S. B., Kentucky State Coll., 1886, Bruce Fellow, 1890–91. —Professor of Biology, Bryn Mawr.

Augustus Taber Murray, (F), A. B., Haverford, 1885, Professor, Earlham Coll., 1888–91, and Colorado Coll., 1891–92.—Professor of Greek, Leland Stanford Jr. University.

Wyatt William Randall, A. B., St. John's, 1884.—Associate in Chemistry.

George Mann Richardson, (F), A. C., Lehigh, 1886, Instructor, Lehigh, 1890–91.—Professor of Organic Chemistry, Leland Stanford Jr. Univ.

Joseph Samuel Shefloe, (F), A. B., Luther, 1885.—Professor of Romance Languages, Woman's College of Baltimore.

Robert Benson Steele, (F), A. B., Univ. of Wis., 1883, Professor, St. Olaf Coll., 1890–91.—Professor of Latin, Illinois Wesleyan Univ.

Andrew Stephenson, A. B., De Pauw, 1882, Associate Professor, Wesleyan (Conn.), 1890–94.—Professor of History, De Pauw Univ.

Frederick Jackson Turner, A. B., Univ. of Wis., 1884.—Professor of American History, Univ. of Wisconsin.

John Martin Vincent, A. B., Oberlin, 1883, Instructor and Associate, 1890–95.—Associate Professor of History.

Shozaburo Watase, (F). S. B., Sapporo Agric. Coll., 1884, Bruce Fellow, 1889–90, Lecturer and Assistant, Clark Univ., 1890–92.—Assistant Professor of Cellular Biology, Univ. of Chicago.

James Albert Woodburn, (F), A. B., Indiana Univ., 1876.—Professor of American History, Indiana Univ. (33)

1891.

Alfred Bagby, Jr., A. B., Richmond, 1885, Adjunct Professor, S. C. Univ., 1891–93.—Attorney at Law, Baltimore.

James William Black, A. B., 1888, Acting Professor, Georgetown Coll., Ky., 1891–92, Associate Professor, Oberlin, 1892–94.—Professor of History and Political Economy, Colby Univ.

Charles Pliny Brigham, A. B., 1888.—Chemist, Baltimore.

Charles Edward Coates, Jr., A. B., 1887, Professor, St. John's, Md., 1891–93.—Professor of Chemistry, Louisiana State Univ.

Edwin Grant Conklin, (F), S. B., Ohio Wesleyan, 1885, Professor, Ohio Wesleyan, 1891–94, and Northwestern Univ., 1894–95.—Professor of Comparative Embryology, Univ. of Pa.

Paul Joseph Dashiell, A. B., 1887, Instructor, Lehigh, 1889–90, 1891–92.—Professor of Chemistry, U. S. Naval Academy.

Hermann Louis Ebeling, (F), A. B., 1882.—Professor of Greek, Miami Univ.

William Snyder Eichelberger, (F), A. B., 1886.—Instructor in Mathematics and Assistant in Astronomy, Wesleyan Univ.

Thomas Perrin Harrison, (F), S. C. Military Acad., 1886, Associate Professor, Clemson Agric. Coll., 1891–95.—Professor of English, Davidson.

Walter Jones, A. B., 1888, Acting Professor, Wittenberg Coll., 1891–92, Instructor and Professor of Analytical Chemistry, Purdue Univ., 1892–95.—Fellow by Courtesy.

Henry Parker Manning, (F), A. B., Brown, 1883.—Assistant Professor of Pure Mathematics, Brown Univ.

George Frederick Metzler, A. B., Albert Coll., 1880, Instructor, Univ. of Mich., 1892–93.—Instructor in Mathematics, Queen's Univ., Ont.

William McCracken Milroy, A. B., Geneva Coll., 1877.—Professor of Latin, Geneva College, Pa.

John Leverett Moore, (F), A. B., Princeton, 1881, Tutor, Princeton, 1882–85, Instructor, 1888–89.—Professor of Latin, Vassar Coll.

Wilfred Pirt Mustard, (F), A. B., Toronto, 1886, Professor, Colorado Coll., 1891–93.—Professor of Latin, Haverford College.

Barker Newhall, (F), A. B., Haverford, 1887, Instructor, Brown Univ., 1892–95.—Fellow by Courtesy.

George Petrie, A. M., Univ. of Virginia, 1887.—Professor of History, Alabama Polytechnic Institute.

Edward Bennett Rosa, (F), S. B., Wesleyan, Conn., 1886.—Professor of Physics, Wesleyan University.

Edward Alsworth Ross, A. B., Coe Coll., 1886, Professor, Indiana Univ., 1891–92, Associate Professor, Cornell, 1892–93.—Professor of Economic Theory and Finance, Leland Stanford Jr. University.

Charles Edward Saunders, (F), A. B., Toronto, 1888, Professor, Central Univ., Ky., 1891–93.—Ottawa, Canada.

Sidney Sherwood, A. B., Princeton, 1879, Instructor, Univ. of Pa., 1891–92, Associate, 1892–95.—Associate Professor of Political Economy.

Moses Slaughter, (F), A. B., Indiana Asbury Univ., 1883, Instructor, Bryn Mawr, 1887–88.—Professor of Latin, Iowa College.

Bernard Christian Steiner, (F), A. B., Yale, 1888, LL. B., Univ. of Maryland, 1894, Instructor, Williams, 1891–92.—Librarian, Enoch Pratt Free Library, Baltimore; Associate in History.

William Howe Tolman, A. B., Brown, 1882. —General Agent, Poor Association, New York.

Stephen Beauregard Weeks, A. B., Univ. of North Carolina, 1886, Professor, Trinity Coll., N. C., 1891-93.—Bureau of Education, Washington.

John White, Jr., (F), A. B., 1888, Assistant, Cornell, 1891-93.—Instructor in Chemistry, University of Nebraska.

Westel Woodbury Willoughby, (F), A. B., 1888, Acting Assistant Professor, Stanford Univ., 1894-95.—Attorney at Law, Washington; Reader in Political Science.

Arthur Burnham Woodford, Ph. B., Yale, 1881, Instructor, Univ. of Pennsylvania, 1891-92.—Professor in the College of Social Economics, New York. (28)

1892.

Eugene Thomas Allen, A. B., Amherst, 1887, Acting Professor, Univ. of Colorado, 1892-93, Assistant, Harvard, 1894-95.

William Wilson Baden, (F), A. B., 1881, LL. B., Univ. of Maryland, 1883, Professor, Southwestern Univ., 1892-93.—Professor of Greek, Central University, Ky.

Robert Payne Bigelow, (F), S. B., Harvard, 1887, Bruce Fellow, 1891-93.—Instructor in Biology, Mass. Inst. of Technology.

Edwin Winfield Bowen., A. B., Randolph Macon, 1887, Assistant Professor, Univ. of Missouri, 1892-93.—Professor of Latin, Randolph Macon College.

Immanuel Moses Casanowicz.—Washington, D. C.

Starr Willard Cutting, A.B., Williams, 1887. —Associate Professor of German, University of Chicago.

Rev. William Levering Devries, (F), A. B., 1888, B. D., General Theol. Sem., N. Y., 1894.—Clergyman, Alberton, Md.

Albert Bernhardt Faust, (F), A. B., 1889.—Instructor in German.

George Wilton Field, A. B., Brown, 1887.—Associate Professor of Cellular Biology, Brown University.

Joseph Elliott Gilpin, A. B., 1889.—Instructor in Chemistry.

John Leslie Hall, (F).—Professor of English and History, William and Mary College.

William Asbury Harris, (F), A. M., Richmond Coll., 1886, Acting Professor, Ripon Coll., 1892-93.—Professor of Greek, Baylor University, Texas.

Frederick Clemson Howe, A. B., Allegheny Coll., 1889.—Cleveland, O.

William Isaac Hull, A. B., 1889.—Professor of History, Economics, and Social Science, Swarthmore College.

Harry Clary Jones, (F), A. B., 1889.—Instructor in Physical Chemistry.

James Lawrence Kellogg, (F), S. B., Olivet, 1888.—Professor of Biology, Olivet College, Mich.

Charles Rollin Keyes, (F), S. B., Iowa State Univ., 1887.—State Geologist, Jefferson, Mo.

Elmer Peter Kohler, (F), A. B., Muhlenberg, 1886.—Associate in Chemistry, Bryn Mawr College.

*Paul Erasmus Lauer, (F), A. B., Adelbert, 1885, Assistant Superintendent of Schools, Cleveland, 1892-93. **February* 20, 1893.

Edwin Seelye Lewis, (F), A. B., Wabash, 1888.—Assistant Professor of Romance Languages, Princeton.

David Judson Lingle, (F), S. B., Univ. of Chicago, 1885.—Instructor in Physiology, University of Chicago.

Alvin Frank Linn, (F), A. B., Wittenberg, 1884.—Professor of Chemistry and Mineralogy, Wittenberg College, Ohio.

James Alexander Lyman, A. B., Beloit, 1888, Docent, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Portland Academy, Oregon.

John Hanson Thomas Main, (F), A. B., Moore's Hill, 1880.—Professor of Greek, Iowa College.

Frank Jewett Mather, Jr., (F), A. B., Williams, 1889.—Instructor in English, Williams College.

Michael Andrew Mikkelsen, (F), A. B., Luther, 1886.—Montclair, N. J.

Robert Milton Parks, Jr., A. B., Indiana Univ., 1879, Professor, Furman University, 1892-93.—Professor of Chemistry, Central University, Ky.

Charles Lane Poor, (F), S. B., Coll. of the City of New York, 1886, Instructor and Associate, 1891-95.—Associate Professor of Astronomy.

John Dyneley Prince, (F), A. B., Columbia, 1888.—Professor of Semitic Languages, University of the City of New York.

John Cunningham Robertson, (F), A. M., Univ. of Virginia, 1885.—Professor of Greek, St. Stephen's College, N. Y.

Charles Hunter Ross, (F), S. B., Alabama Agricultural, 1886.—Adjunct Professor of Modern Lang., Alabama Polytechnic Institute.

Harry Luman Russell, S. B., Univ. of Wisconsin, 1888.—Assistant Professor of Bacteriology, University of Wisconsin.

William Amasa Scott, A. B., Univ. of Rochester, 1886.—Assistant Professor of Economics, University of Wisconsin.

Will Bush Shober, A. B., St. John's, 1885.—Instructor in Chemistry, Lehigh Univ.

Martin Bell Stubbs, A. B., Haverford, 1888.—Chemist, La Salle, Ill.

Harry Maas Ullmann, A. B., 1889, Honorary Fellow, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Lehigh Univ.

Bert John Vos, (F), A. B., Univ. of Michigan, 1888, Instructor, Univ. of Chicago, 1892-93.—Associate in German. (37)

1893.

Henry Harold Ballard, A. B., 1888, Instructor, St. Paul's School, L. I., 1890-91.—Instructor in Chemistry, Rose Polytechnic Institute.

Florence Bascom, S. B., Univ. of Wisconsin, 1884, Instructor, Ohio State Univ., 1893-95.—Reader in Geology, Bryn Mawr.

Jasper Luther Beeson, A. B., Univ. of Alabama, 1889.—Chemist, Louisiana Sugar Experiment Station, New Orleans.

Alexander Mitchell Carroll, (F), A. M., Richmond, 1888.—Professor of Greek, Richmond College, Va.

Andrew Fuller Craven, A. B., Harvard, 1889, LL. B., Univ. of Chicago, 1870.—Assistant Professor of Economics, Columbian University.

John Bascom Crenshaw, A. M., Randolph Macon, 1881.—Instructor in Physical Culture.

Ulysses Sherman Grant, (F), S. B., Univ. of Minnesota, 1888.—Assistant State Geologist, Minneapolis.

David I. Green, A. B., Alfred Univ., 1885.—Superintendent, Organized Charities, Hartford, Conn.

William Richard Grey, A. B., Davidson, 1884.—Professor of Latin and French, Davidson College.

George Henry Haynes, A. B., Amherst, 1887.—Professor of History and Political Science, Worcester Polytechnic Institute.

Charles Downer Hazen, A. B., Dartmouth, 1889.—Professor of History, Smith College.

Frank Irving Herriott, A. B., Iowa, 1890.—Professor of Economics, Iowa College.

David Hull Holmes, (F), A. B., Ohio Wesleyan, 1885, Acting Professor of Latin, Allegheny Coll., 1893-94.—Fellow by Courtesy; Associate Professor of Latin, Univ. of Kansas.

Arthur John Hopkins, (F), A. B., Amherst 1885, Professor, Westminster Coll., 1893-94.—Assistant Professor of Chemistry, Amherst.

Theodore Hough, (F), A. B., 1886, Instructor, McDonogh School, 1886-89.—Assistant Professor of Physiology, Mass. Institute of Technology.

James Alton James, (F), B. L., Univ. of Wisconsin, 1888.—Professor of History, Cornell College, Iowa.

Henry Read McIlwaine, A. B., Hampden Sidney, 1885.—Professor of English and History, Hampden Sidney College.

Louis Emil Menger, (F), A. B., Mississippi Coll., 1888, Instructor, 1893-94.—Associate in Romance Languages.

Colyer Meriwether, A. B., 1886, Instructor in Sendai, Japan, 1889-92.—Instructor, Washington High School.

*Lucius Salisbury Merriam, (F), S. B., Vanderbilt, 1889, Instructor in Political Economy, Cornell, 1893. **November* 18, 1893.

Maynard Mayo Metcalf, (F), A. B., Oberlin, 1889, Bruce Fellow, 1893.—Associate Professor of Biology, Woman's Coll., Balt.

Daniel Alexander Murray, (F), A. B., Dalhousie, 1884, Associate Professor, University of the City of New York, 1890-94.—Instructor in Mathematics, Cornell Univ.

William Peters Reeves, A. B., 1889.—Assistant in English, Union College.

Charles Alphonso Smith, A. B., Davidson, 1884.—Professor of English, Louisiana State University.

George Owen Squier, (F), U. S. Military Academy, 1887.—First Lieut., U. S. Army; Artillery School, Fortress Monroe, Va.

John Nesbit Swan, A. B., Westminster Coll., Pa., 1886.—Professor of Chemistry, Monmouth College, Ill.

Frederick Tupper, Jr., (F), A. B., Charleston, 1890, Professor, Wells Coll., 1893-94.—Professor of English, Univ. of Vermont.

Frank Alfred Wolff, Jr., (F), A. B., 1890.—Chemist, Dept. of Agriculture, Washington. (28)

1894.

James Nesbit Anderson, A. M., Univ. of Virginia, 1887.—Professor of Latin and Greek, University of Oklahoma.

John Spencer Bassett, (F), A. B., Trinity (N. C.), 1888.—Professor of History, Trinity College, N. C.

William Julian Albert Bliss, A. B., Harvard, 1888, Lecturer, 1894-95, Instructor Woman's Coll., Balt., 1894-95.—Assistant in Physics.

James Douglas Bruce, A. M., Univ. of Virginia, 1883.—Associate in English Philology, Bryn Mawr College.

James Dowden Bruner, A. B., Franklin Coll., 1888, Professor, Univ. of Illinois, 1893–95.—Assistant Professor of Romance Lang., Univ. of Chicago.

John Emery Bucher, A. C., Lehigh, 1891.—Instructor in Chemistry, Tufts College.

Frank Kenneth Cameron, A. B., 1891.—Associate Professor of Chemistry, Catholic Univ.

William Embert Chamberlin, A. B., Oberlin, 1887, Instructor, Wabash Coll., 1894–95.—Teacher, Baltimore.

Abraham Cohen, (F), A. B., 1891.—Instructor in Mathematics.

Louis Leaming Forman, A. M., Univ. of Pennsylvania, 1890.—Instructor in Greek, Cornell University.

Edward Curtis Franklin, S. B., Univ. of Kansas, 1888.—Associate Professor of Chemistry, University of Kansas.

Joseph Hendren Gorrell, A. B., Washington and Lee, 1888.—Professor of Modern Languages, Wake Forest College.

George Perry Grimsley, A. B., Ohio State Univ., 1890.—Professor of Geology, etc., Washburn College.

Ross Granville Harrison, (F), A. B., 1889, Bruce Fellow, 1894, Lecturer, Bryn Mawr, 1894–95.—Student in Germany.

Robert Nelson Hartman, A. B., Pennsylvania Coll., 1891.—Professor of Chemistry, Missionary Institute, Selin's Grove, Pa.

Jacob H. Hollander, (F), A. B., 1891.—Instructor in Economics.

Lorrain Sherman Hulburt, A. B., Univ. of Wisconsin, 1883, Instructor, 1892–94.—Associate in Mathematics.

Masanobu Ishizaka, Ph. B., Albion Coll., 1891.—Lecturer in History and Economics, Mie-Ji-Gaku-In, Tokio.

Thomas Atkinson Jenkins, A. B., Swarthmore, 1887.—Professor of Romance Languages, Vanderbilt.

Christopher Johnston, (F), A. M., Univ. of Virginia, 1879, Instructor, 1891–94.—Associate in the Semitic Languages.

Emory Bair Lease, (F), A. B., Ohio Wesleyan, 1885.—Professor of Latin, Allegheny Coll.

Arthur Stanley Mackenzie, (F), A. B., Dalhousie, 1885.—Associate Professor of Physics, Bryn Mawr College.

Edward Payson Manning, (F), A. B., Brown, 1889.—Instructor in Mathematics, St. Lawrence University, N. Y.

Charles Carroll Marden, A. B., 1889, Instructor, Univ. of Michigan, 1890–91.—Instructor in Romance Languages.

Edward Bennett Mathews, (F), A. B., Colby, 1891.—Associate in Mineralogy.

Philip Randle Moale, A. B., 1889.—Analytical Chemist, New York City.

Constance Pessels, B. L., Univ. of Texas, 1886.—Austin, Texas.

Jesse Siddall Reeves, S. B., Amherst, 1891.—Richmond, Ind.

Arthur Percy Saunders, (F), A. B., Toronto, 1890.—Instructor in Chemistry, Univ. of Wisconsin.

Robert Lincoln Slagle, A. B., Lafayette, 1887.—Professor of Chemistry, S. Dakota Agric. Coll.

Daniel Gurden Stevens, Jr., (F), A. B., 1891.—Student, Crozer Theological Seminary.

Frederick Henry Sykes, (F), A. B., Toronto, 1885.—Professor of English, Western Univ., London, Ont.

Milo Scott Walker, Ph. B., Wooster, 1889.—Instructor in Chemistry and Physics, Racine (Wis.) High School.

George Francis Weida, (F).—Professor of Chemistry, Blackburn University, Ill.

(34)

1895.

Rufus Mather Bagg, A. B., Amherst, 1891.—Assistant in Geology.

Thomas Stockham Baker, (F), A. B., 1891.—Assistant in German.

James Curtis Ballagh, A. B., 1894.—Assistant in History.

Daniel Base, A. B., 1891.—Associate Professor of Chemistry, Maryland Coll. of Pharmacy.

Henry Marvin Belden, A. B., Trinity (Conn.), 1888.—Associate Professor of English, Univ. of Missouri.

Arthur Fisher Bentley, (F), A. B., 1892.—Docent in Sociology, Univ. of Chicago.

Samuel Walker Beyer, (F), S. B., Iowa Agric., 1889.—Associate Professor of Geology, Iowa Agric. Coll.

William Bromwell, A. B., 1888.—Chemist, Birmingham, Ala.

Clarence Griffin Child, (F), A. B., Trinity (Conn.), 1886.—Assistant Editor, Worcester's Dictionary; University Extension Lecturer, Philadelphia.

Fonger De Haan, (F).—Instructor in Romance Languages.

Charles Sumner Estes, A. B., Colby, 1884.—Principal, Ricker Inst., Houlton, Me.

Henry Fay, A.B., Lafayette, 1889.—Instructor in Chemistry, Mass. Inst. of Tech.

Henry Stewart Gane, (F), A. B., Amherst, 1891.—U. S. Geol. Survey, Washington.

George William Gray, A.B., 1890.—Chemist, Standard Oil Company, Whiting, Ind.

John Joseph Griffin, A. B., Ottawa Univ., 1881.—Professor of Chemistry, Catholic University.

William August Haussmann, (F), A. B., 1892.—Instructor in German, Petersburg, Va.

John Haynes, A. B., Williams, 1888.—Instructor in History, etc., Free Academy, Norwich, Conn.

Samuel Rivers Hendren, A. B., Washington and Lee, 1892.—Staunton, Va.

Howard Haines Higbee, A. B., Yale, 1884.—Assistant in Chemistry, Tufts Coll.

Rockwell Dennis Hunt, Ph. B., Napa Coll., 1890.—Professor of History, etc., Univ. of the Pacific.

Joseph Rufus Hunter, A. B., Wake Forest, 1885.—Professor of Chemistry, Richmond Coll., Va.

George Wesley Johnston, (F), A. B., Toronto, 1886.—Acting Assistant Professor of Latin, Cornell.

Thomas Franklin Kane, (F), A. B., De Pauw, 1888.—Professor of Latin, Olivet College.

William Jay Karslake, S. B., Lafayette, 1891.—Instructor in Chemistry, Dalhousie Univ.

George Charles Keidel, (F), A. B., 1889.—Assistant in Romance Languages.

William Hamilton Kirk, (F), A. B., 1893.—Instructor in Greek, Vanderbilt.

John Holladay Latane, A. B., 1892.—Fellow by Courtesy.

Exum Percival Lewis, S. B., Columbian, 1888.—Instructor in Physics, Univ. of California.

William Henry Maltbie, (F), A. B., Ohio Wesleyan, 1890.—Associate Professor of Mathematics, Woman's Coll., Balt.

Solomon Reid McKee, A. B., Davidson, 1888.—Professor of Chemistry, Ogden Coll., Ky.

Thomas Francis Moran, (F), A. B., Univ. of Mich., 1887.—Professor of History, etc., Purdue Univ.

Louis Trenchard More, (F), Ph. B., Washington Univ., 1892.—Instructor in Physics, Worcester Polytechnic Inst.

Anthony Moultrie Muckenfuss, A. B., Wofford, 1889.—Professor of Chemistry, Millsaps Coll., Miss.

Lyman Churchill Newell, Ph. B., Brown, 1890.—Instructor in Chemistry, High School, Somerville, Mass.

James Flack Norris, (F), A. B., 1892.—Assistant in Chemistry, Mass. Inst. of Technology.

Edwin Fitch Northrup, (F), A. B., Amherst, 1891.—Electrical Engineer, Park City, Utah.

Robert Somerville Radford, B. Ph., Univ. of Va., 1889.—Instructor in Latin, Academy of Northwestern Univ.

René de Saussure, École Polytechnique, Paris.—Professor of Mathematics, Catholic Univ.

Thomas Edward Shields, A. M., St. Mary's Sem., 1892.—Instructor in Biology, St. Paul's Theol. Sem., Minn.

John Archer Silver, A. B., Princeton, 1886.—Professor of History, Hobart Coll., New York.

Alfred William Stratton, (F), A. B., Toronto, 1887.—Docent in Sanskrit, Univ. of Chicago.

William Stuart Symington, Jr., A. B., 1891, Associate Professor, Leland Stanford, 1894-95.—Professor of Romance Lang., Amherst.

Masayoshi Takaki, S. B., Syracuse, 1891.—Student at Columbia College.

Robert Richardson Tatnall, S. B., Haverford, 1890.—Instructor in Physics, Univ. of Pa.

Thaddeus Peter Thomas, B. P., Univ. of Tenn., 1885.—Associate Professor of History, Woman's College, Balt.

James Waddell Tupper, A. B., Dalhousie, 1891.—Fellow by Courtesy.

William Achenbach Wetzel, A. B., Lafayette, 1891.—Ackermanville, Pa. (47)

1896.

William Francis Gallaway, (F), A. B., 1891.—Fellow by Courtesy.

Reid Hunt, (F), A. B., 1891.—Fellow.

James Pinckney Kinard, S. C. Military Acad., 1886.—Professor of English, Winthrop School, Rock Hill, S. C.

Frederic William Speirs, S. B., Worcester Polytechnic, 1888.—Instructor in History and Economics, Drexel Institute, Phila.

Harry Langford Wilson, (F), A. B., Queen's Univ. (Ont.), 1887.—Instructor in Greek and Latin. (5)

(Degrees will also be conferred at the close of the academic year in June.)

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9. Bachelors of Arts.

(When the institution is not named, the Johns Hopkins University is to be understood. (F) indicates that the person has held a Fellowship here.—*Died.)

1879.

George Washington McCreary.—City Librarian, Baltimore.

Chase Palmer, (F), Ph. D., 1882, Assistant, Mass. Inst. of Tech., 1882–83, Professor, Mass. State Normal School, Salem, 1883–87, Assistant, Tufts Coll., 1887–88, Professor of Chemistry, Wabash Coll., 1888–90, and Missouri School of Mines, 1890–91.—Louisville, Ky.

Edward Henry Spieker, (F), Ph. D., 1882, Instructor and Associate, 1882–88.—Associate Professor of Greek and Latin.

(3)

1880.

Rev. Thomas Milton Beadenkopf, B. D., Yale, 1885.—Clergyman, Baltimore.

Allen Kerr Bond, M. D., Univ. of Maryland, 1882.—Physician, Baltimore.

William Cathcart Day, (F), Ph. D., 1883, Professor, St. John's Coll., 1883–84, and Univ. of Nashville, 1884–87.—Professor of Chemistry, Swarthmore College, Pa.

Henry Laurence Gantt, M. E., Stevens Inst. of Tech., 1884, Instructor, McDonogh School, 1886–87.—Mechanical Engineer, Newark, N. J.

Edgar Goodman, LL. B., Univ. of Maryland, 1881.—Attorney at Law, Baltimore.

Rev. Carl Eckhardt Grammer, Va. Theol. Sem., 1884, D. D., Trinity (Conn.), 1895, Clergyman, Hancock, Md., and Cincinnati, O., 1884–87.—Professor of Ecclesiastical History, Virginia Theol. Sem.

Alexander Fridge Jamieson.—Latin Master, Lawrenceville School, N. J.

*Edmund Allen Jarvis. **October* 15, 1880.

Stewart Brian Linthicum, LL. B., Univ. of Maryland, 1882.—Attorney at Law, Portland, Oregon.

John Hanson Lowe, LL. B., University of Maryland, 1882.—Attorney at Law, Baltimore.

Rev. Leigh Clinton Morgan, late Instructor, Kenyon College, O.

*Nelson Palmer. **June* 12, 1886.

Thomas Pettigrew.—Civil Engineer, Parkersburg, W. Va.

Harry Fielding Reid, (F), Ph. D., 1885, Assistant, 1882–84, Professor of Mathematics (1886–89) and of Physics (1889–94), Case School.—Lecturer in Geology.

Rev. Wiltz Raymond Stricklen.—Clergyman, Baltimore.

Lewis Webb Wilhelm, (F), Ph. D., 1884.—Mathematical Instructor, Baltimore.

(16)

1881.

William Wilson Baden, (F), Ph. D., 1892, LL. B., Univ. of Maryland, 1883, Professor, Southwestern Univ., 1892–93.—Professor of Greek, Central University, Ky.

Henry Johns Bowdoin, LL. B., Univ. of Maryland, 1883.—Attorney at Law, Balt.

John Wilson Brown.—Philadelphia, Pa.

David Talbot Day, (F), Ph. D., 1884, Teacher, Balt., 1885–86.—U. S. Geol. Survey, Washington.

William Henry Howell, (F), Ph. D., 1884, M. D., Univ. of Michigan, 1890, Assistant, Associate, and Associate Professor, 1884–89, Lecturer and Professor, Univ. of Michigan, 1889–92, Associate Professor, Harvard, 1892–93.—Professor of Physiology.

John Hemsley Johnson, LL. B., Univ. of Maryland, 1887, Instructor, McDonogh School, 1881–86.—Attorney at Law, Balt.

James Edward Keeler, D. Sc., Univ. of California, 1893, Allegheny Observ., 1882–86, Fellow, Royal Astronomical Society of London, Lick Observ., 1886–91.—Professor of Astro-Physics, Western Univ. of Pa., and Director, Allegheny Observatory.

Rev. Edwin George Richardson.—Clergyman, Milwaukee, Wis.

Adoniram Judson Robinson, LL. B., Univ. of Maryland, 1885, Instructor, Balt. City Coll., 1881–87.—Attorney at Law, Balt.

*Henry Rolando, M. D., Univ. of Maryland, 1883, Resident Physician, Presbyterian Hospital, New York, 1883–85. **October* 4, 1888.

Lee Sale, LL. B., Washington Univ., 1885, Instructor, Louisville High School, 1881–83.—Attorney at Law, St. Louis, Mo.; Lecturer, St. Louis Law School.

Mactier Warfield, M. D., Univ. of Maryland, 1884.—Physician, Baltimore.

(12)

1882.

William Hughlett Adkins, LL. B., Univ. of Maryland, 1883.—Attorney at Law, Easton, Md.

Thomas Alexis Berry.—Laurel, Md.

Gustav Bissing, (F), Ph. D., 1885.—Principal Examiner, Div. A, U. S. Patent Office.

Walter Bernard Clarkson, Teacher, Jacksonville, 1880–83.—Superintendent of County Schools, Jacksonville, Fla.

Hermann Louis Ebeling, (F), Ph. D., 1891.—Professor of Greek, Miami University.

Louis Garthe.—Baltimore.

Edward Ingle.—Baltimore.

Richard Fuller Kimball, LL. B., Univ. of Maryland, 1884.—Attorney at Law, Baltimore.

Gustav Adolph Liebig, Jr., (F), Ph. D., 1885, Assistant, 1888–90.—Tarrytown, N. Y.

Charles William Emil Miller, (F), Ph. D., 1886, Professor, Peoria (Ill.) High School, 1888–90, and Walther Coll., St. Louis, 1890–91.—Associate in Greek.

James Page, Allegheny Observatory, 1886–87.—U. S. Coast Survey, Washington.

Albert Gallatin Palmer, (F), Ph. D., 1885, Assistant and Assistant Professor, Swarthmore, 1885–87.—Chemist, Baltimore.

Robert Miller Reese.—U. S. Department of Agriculture, Washington, D. C.

Lewis Tebbetts Stevens, (F), M. D., Harvard, 1887.—Physician, St. Louis, Mo.

Herbert Thorndyke Tiffany, LL. B., Univ. of Maryland, 1885.—St. Paul, Minn. (15)

1883.

William Shirley Bayley, (F), Ph. D., 1886.—U. S. Geological Survey; Professor of Geology and Mineralogy, Colby Univ.

Maurice Fels, LL. B., University of Pennsylvania, 1886.—Attorney at Law, Philadelphia.

David Sterrett Gittings.—Baltimore.

William Beatty Harlan, LL. B., Univ. of Maryland, 1885, A. M., St. John's, 1888.—Attorney at Law, Belair, Md.

George Theophilus Kemp, (F), Ph. D., 1886, M. D., Long Island Med. Coll., 1891, Demonstrator, Univ. of Pa., 1886–87, Associate and Associate Director, etc., Hoagland Lab., 1888–93.—Fellow by Courtesy.

Gonzalez Lodge, (F), Ph. D., 1886, Professor, Davidson, 1886–88.—Professor of Latin, Bryn Mawr College.

William Edgar Stratton, M. D., Harvard, 1886.—Physician, Brooklyn, N. Y.

Henry Winslow Williams, LL. B., Univ. of Maryland, 1885.—Attorney at Law, Baltimore.

Henry Van Peters Wilson, (F), Ph. D., 1888, Bruce Fellow, 1888–89.—Professor of Biology, University of North Carolina.

William John Witzenbacher, Instructor, McDonogh School, 1883–86.—Attorney at Law, Hagerstown, Md. (10)

1884.

Rev. Albert Clayton Applegarth, Ph. D., 1887.—Clergyman, Chester, Pa.

Charles Walter Artz, LL. B., Columbia, 1886.—Attorney at Law, New York City.

Walter Bliss Canfield.—Chemist, Coatesville, Pa.

George Gibson Carey, Jr., LL. B., Univ. of Maryland, 1886.—Attorney at Law, Baltimore.

William Kennedy Cromwell.—Baltimore.

Charles William Remsberg Crum, M. D., Univ. of Maryland, 1888, Instructor, Mercersburg Coll., 1884–86, 1889–90, Professor of Mathematics, Ursinus Coll., 1892–95.—Graduate Student.

Harry Friedenwald, M. D., Coll. of Phys. and Surg., Balt., 1886.—Physician, Balt.

William Lindsay Glenn, LL. B., Univ. of Maryland, 1888.—Student, General Theol. Sem., New York.

John Hinkley, LL. B., University of Maryland, 1886.—Attorney at Law, Balt.

Charles Morris Howard, LL. B., Univ. of Maryland, 1888.—Attorney at Law, Balt.

John Deering Lord, Jr., LL. B., Columbia, 1886.—Attorney at Law, Baltimore.

Jere Williams Lord, M. D., Univ. of Pennsylvania, 1887.—Instructor in Anatomy.

William Patrick Lyons, LL. B., Univ. of Maryland, 1886.—Attorney at Law, Balt.

Edgar George Miller, Jr., LL. B., Univ. of Maryland, 1886.—Attorney at Law, Baltimore.

William Ridgely Orndorff, (F), Ph. D., 1887.—Assistant Professor of Organic Chemistry, Cornell University.

George Dobbin Penniman, LL. B., Univ. of Maryland, 1886.—Attorney at Law, Baltimore.

William Henry Perkins, Jr., LL. B., Univ. of Maryland, 1888.—Attorney at Law, Baltimore.

George Clement Stokes, Jr., LL. B., Univ. of Maryland, 1888.—Attorney at Law, Baltimore.

*William John Thomas, Professor of Mathematics, Western Maryland College, 1884–85. **March* 9, 1885.

*William Ferdinand Walz. **March* 21, 1887.

Frederick Henry Wilkens, Ph. D., Leipsic, 1891.—Assistant Professor of German, University of Wisconsin.

George Wishart Edmond, (*extra ordinem*).—Assistant, 1889–90.—Garvanza, Cal.

Charles Howard Shinn, (*extra ordinem*).—San Francisco, Cal. (23)

1885.

John Pendleton Campbell, (F), Ph. D., 1888.—Professor of Biology, Univ. of Georgia.

John Glenn, Jr., LL. B., Univ. of Maryland, 1887.—Attorney at Law, Baltimore.

Rev. Junius Moore Horner, B. D., General Theol. Sem., N. Y., 1890.—Classical Instructor, Oxford, N. C.

James Albert Loane.—Baltimore.

Harry Wilbur Price, LL. B., Columbian, 1887.—Attorney at Law, Chicago.

Benjamin Titus Roberts, Jr.—Morgan Park, Ill.

Moses Roth Ryttenberg, LL. B., Univ. of Maryland, 1888.—Attorney at Law, New York.

Hugo Steiner, LL. B., Univ. of Maryland, 1887.—Attorney at Law, Baltimore.

Henry Hazlehurst Wiegand.—Electrician, Baltimore. (9)

1886.

Joseph Sweetman Ames, (F), Ph. D., 1890, Assistant and Associate, 1889–93.—Associate Professor of Physics.

Rev. Wilson Lloyd Bevan, B. D., General Theol. Sem., N. Y., 1889, A. M. and Fellow of Columbia, 1889, Ph. D., Munich, 1893.—Clergyman, Concord, Mass.

Thomas Hepburn Buckler, M. D., Univ. of Maryland, 1888.—Physician, Baltimore.

Alfred Robert Louis Dohme, Ph. D., 1889.—Chemist, Baltimore.

Albert Alvin Doub, Teacher, Frostburg, Md., 1886–93.—Attorney at Law, Cumberland, Md.

William Snyder Eichelberger, (F), Ph. D., 1891.—Instructor in Mathematics and Assistant in Astronomy, Wesleyan Univ.

Harry English.—Instructor in the High School, Washington, D. C.

Abraham Flexner.—Classical Instructor, Louisville, Ky.

William Edward Gates.—Cleveland, O.

*William Curns Lawrence Gorton, (F), Ph. D., 1889, Associate Professor and Professor of Mathematics, Woman's College of Baltimore, 1888–94. **November* 8, 1894.

Joseph Edward Harry, (F), Ph. D., 1889.—Professor of Greek and German, Georgetown College, Ky.

Benjamin Henry Hartogensis.—Editor, Baltimore.

James Shaler Hodges, Instructor, St. Paul's School, Concord, N. H., 1886–88.—Electrician, Baltimore.

Theodore Hough, (F), Ph. D., 1893, Instructor, McDonogh School, 1886–89.—Assistant Professor of Physiology, Mass. Institute of Technology.

Percy Meredith Hughes.—Instructor in the High School, Washington, D. C.

John Henry Laessig, Jr.—Chemist, Baltimore.

Allan McLane, Jr., LL. B., Univ. of Maryland, 1888.—Attorney at Law, Balt.

John Hanson Thomas McPherson, (F), Ph. D., 1890, Instructor, Univ. of Michigan, 1890–91.—Professor of History, University of Georgia.

Colyer Meriwether, Ph. D., 1893, Instructor in Sendai, Japan, 1889–92.—Instructor, High School, Washington, D. C.

John Pleasants.—Baltimore.

Richard Hall Pleasants, Jr., LL. B., Univ. of Maryland, 1889.—Attorney at Law, Baltimore.

William Flood Smith, M. D., Coll. of Phys. and Surg., Balt., 1889, Instructor, McDonogh School, 1886–87.—Physician, Balt.

Michael Daniel Stein.—San Francisco, Cal.

Bernard Wiesenfeld, LL. B., University of Maryland, 1889.—Attorney at Law, Baltimore.

John Whitridge Williams, M. D., Univ. of Maryland, 1888.—Associate in Obstetrics.

Langdon Williams.—Teacher, Philadelphia.

William Klapp Williams, Ph. D., 1889.—Boston, Mass.

John Randolph Winslow, M. D., Univ. of Maryland, 1888.—Physician, Baltimore.

*Allan Chase Woods. **September* 9, 1886.

Frederick George Young, Vice-President, S. D. Normal School, 1888–91.—Professor of Economics and History, Univ. of Oregon.

*Thomas McCabe, (*extra ordinem*), (F), Ph. D., 1888, Instructor, Univ. of Michigan, 1888–89, Professor, Indiana Univ., 1889–90, Associate in French, Bryn Mawr Coll., 1890–91. **February* 22, 1891. (31)

1887.

Edward Carey Applegarth, (F), Ph. D., 1890, M. D., Coll. of Phys. and Surg., Balt., 1892.—Physician, Baltimore.

Richard Howard Bayard, LL. B., Univ. of Maryland, 1889.—Attorney at Law, Baltimore.

Herbert Maxwell Brune, LL. B., Univ. of Maryland, 1889.—Attorney at Law, Baltimore.

Charles Edward Coates, Jr., Ph. D., 1891, Professor, St. John's Coll., 1891-93.—Professor of Chemistry, La. State University.

Rev. William Roswell Cole, B. D., Harvard, 1890.—Baltimore.

Paul Joseph Dashiell, Ph. D., 1891, Instructor, Lehigh, 1889-90, 1891-92.—Professor of Chemistry, U. S. Naval Academy.

George Peter Dreyer, (F), Ph. D., 1890, Demonstrator, 1890-92.—Associate in Biology.

Edward Duffy, Jr., LL. B., Univ. of Maryland, 1889.—Attorney at Law, Baltimore.

James Clark Fifield.—Attorney at Law, Minneapolis, Minn.

Julius Friedenwald, M. D., Coll. of Phys. and Surg., Balt., 1890.—Physician, Baltimore.

Douglas Huntly Gordon, LL. B., Univ. of Maryland, 1889.—Editor, Baltimore.

Jay Cæsar Guggenheimer.—Attorney at Law, New York City.

Charles Homer Haskins, Ph. D., 1890, Instructor, 1889-90.—Professor of Institutional History, University of Wisconsin.

George Lincoln Hendrickson, Professor, Colorado Coll., 1889-91.—Professor of Latin, University of Wisconsin.

Franz Otto Karl Hoffmann.—New York.

Robert Milligan McLane, Jr., LL. B., Univ. of Maryland, 1891.—Deputy State's Attorney, Baltimore.

Robert William Rogers, Ph. D., Haverford, 1890, D. D., Wesleyan, 1894, Ph. D., Leipsic, 1895, Instructor, Haverford, 1887-90, Professor, Dickinson, 1890-93.—Professor of Hebrew, Drew Theol. Sem.

Henry Oliver Thompson, LL. B., Univ. of Maryland, 1890.—Attorney at Law, Baltimore.

Benjamin Simon William Tuska, LL. B., Columbia, 1889.—Attorney at Law, New York City.

Rev. Robert William Henry Weech.—Clergyman, Baltimore.

*Edward William Willis, M. D., University of Maryland, 1889. **August* 7, 1893.

Henry Firey Wingert.—Attorney at Law, Hagerstown, Md.

Walter Bell Scaife, (*extra ordinem*), Ph. D., Vienna, 1887.—Pittsburg, Pa.

Albert Henry Smyth, (*extra ordinem*).—Professor of English, Central High School, Philadelphia. (24)

1888.

Henry Harold Ballard, Ph. D., 1893, Instructor, Garden City, L. I., 1890-91.—Instructor in Chemistry, Rose Polytechnic Institute.

Edward Ambrose Bechtel, (F), Professor, Mt. Morris Coll., Ill., 1889-91, and Yankton Coll., 1891-92, Teacher, Dayton, O., 1892-93.—Instructor in Latin, Northwestern University.

James William Black, Ph. D., 1891, Acting Professor, Georgetown Coll., Ky., 1891-92, Associate Professor, Oberlin, 1892-94.—Professor of History, etc., Colby Univ.

Charles Pliny Brigham, Ph. D., 1891.—Chemist, Baltimore.

William Bromwell, Ph. D., 1895.—Graduate Student; Chemist, Birmingham, Ala.

*Hamilton McFarland Brown. **May* 8, 1892.

Arthur Lee Browne.—Chemist, Baltimore.

Charles Hamilton Carey.—Baltimore.

John Broughton Daish, Instructor, Washington High School, 1888-89.—Washington.

Rev. William Levering Devries, (F), Ph. D., 1892, B. D., General Theol. Sem., N. Y., 1894.—Clergyman, Alberton, Md.

Gustav Edward Gieske, M. D., Coll. of Phys. and Surg., Balt., 1891.—Catonsville, Md.

Raleigh Colston Gildersleeve.—Architect, New York City.

Harris Hancock, Ph. D., Berlin, 1894.—Tutor in Mathematics, Univ. of Chicago.

Walter Jones, Ph. D., 1891, Acting Professor, Wittenberg Coll., 1891-92, Instructor and Professor of Analytical Chemistry, Purdue Univ., 1892-95.—Fellow by Courtesy.

*William Augustine Jones, LL. B., Univ. of Alabama, 1889. **February* 11, 1894.

Arthur Lincoln Lamb, Teacher, Baltimore, 1888-92.—Graduate Student.

Charles Day Lanier.—Editor, New York.

John Bright Macauley.—Washington, D. C.

*William Howard Miller, Instructor in Mathematics, Leland Stanford Jr. University, 1891-93. **March* 2, 1893.

*George Neville Moore. **October* 29, 1889.

John Henry O'Donovan, M. D., Univ. of Maryland, 1891.—Physician, Baltimore.

Frank Eugene Reader.—Attorney at Law, New Brighton, Pa.

Louis Rettger.—Instructor, Terre Haute (Ind.) High School.

David Ellsworth Roberts.—Graduate Student.

Lessing Rosenthal, LL. B., Northwestern Univ., 1891.—Attorney at Law, Chicago.

Charles Edmund Simon, M. D., University of Maryland, 1890.—Physician, Baltimore.

Rev. Charles Kephart Swartz, Oberlin Theol. Sem., 1892.—Gettysburg, Pa.

Robert Melvin Tarleton, E. M., Lehigh, 1895.—Mining Engineer, Omaha, Neb.

Edward Lucas White, Assistant, Dartmouth, 1891-92, Teacher, Balt., 1892-95.—Graduate Student.

John White, Jr., (F), Ph. D., 1891, Assistant, Cornell, 1891-93.—Instructor in Chemistry, University of Nebraska.

Westel Woodbury Willoughby, (F), Ph. D., 1891, Acting Asst. Professor, Stanford Univ., 1894-95.—Attorney at Law, Washington; Reader in Political Science.

William Franklin Willoughby.—Statistical Expert, U. S. Dept. of Labor, Washington.

Charles Hiram Chapman, (*extra ordinem*), (F), Ph. D., 1890, Instructor and Associate, 1889-92.—President, Univ. of Oregon.

Charles Collier Holden, (*extra ordinem*), Teacher, N. C. and Md., 1888-95.—Graduate Student. (34)

1889.

Adolph Bernhard, Ph. D., Univ. of Chicago, 1894.—Assistant in Chemistry, University of Chicago.

Hiram Horsburgh Bice, Professor, Austin Coll., 1890-92, and Blackburn Univ., 1892-93.—Instructor in Classics, High School, St. Joseph, Mo.

John Sedgewick Billings, M. D., Univ. of Pennsylvania, 1892.—Physician, New York City.

Walton Bolgiano, M. D., University of Pennsylvania, 1892.—Physician, Baltimore.

Theodore Cooke, Jr., M. D., Univ. of Maryland, 1891.—Physician, Baltimore.

Frank Barnum Culver.—Baltimore.

Richard Edward Edes, M. D., Harvard, 1895, Morgan Fellow, Harvard, 1890-91, Instructor, Mass. Inst. of Tech., 1892-93.

Daniel Nathan Eisendrath, M. D., Chicago Med. Coll., 1891.—Physician, Chicago.

Albert Bernhardt Faust, (F), Ph. D., 1892.—Instructor in German.

Charles Lee Fulton, LL. B., University of Maryland, 1892.—Attorney at Law, Baltimore.

Joseph Elliott Gilpin, Ph. D., 1892.—Instructor in Chemistry.

Ross Granville Harrison, (F), Ph. D., 1894, Bruce Fellow, 1894, Lecturer, Bryn Mawr, 1894-95.—Student in Germany.

George Newton Cressy Henschen, Instructor, Reading High School, 1889-94.—Reading, Pa.

William Sadler Hilles.—Baltimore.

William Isaac Hull, Ph. D., 1892.—Professor of History, etc., Swarthmore College.

Harry Clary Jones, (F), Ph. D., 1892.—Instructor in Physical Chemistry.

George Charles Keidel, (F), Ph. D., 1895.—Assistant in Romance Languages.

Jesse William Lazear, M. D., Coll. of Phys. and Surg. (N. Y.), 1892.—Asst. Resident Physician, Johns Hopkins Hospital.

Alfred Mann, M. D., Coll. of Phys. and Surg. (N. Y.), 1892.

Charles Carroll Marden, Ph. D., 1894, Instructor, Univ. of Michigan, 1890-91.—Instructor in Romance Languages.

William Watson McCulloh, LL. B., University of Maryland, 1892.—Student of Medicine.

Philip Randle Moale, Ph. D., 1894.—Analytical Chemist, New York City.

Waldo Newcomer.—Baltimore.

Leonard Magruder Passano.—Instructor in Mathematics, Mass. Inst. of Technology.

Arthur Jackson Patek, M. D., Univ. of Pennsylvania, 1892.

William Peters Reeves, Ph. D., 1893.—Assistant in English, Union College.

Legh Wilber Reid.—Instructor in Mathematics, Princeton College.

Ralph Robinson, LL. B., Univ. of Maryland, 1891.—Attorney at Law, Baltimore.

Brantz Mayer Roszel, (F).—Fellow by Courtesy.

Rev. John George Sadtler, B. D., General Theol. Sem., N. Y., 1893.—Clergyman, Baltimore.

Benjamin Bittinger Shreeves, LL. B., Univ. of Maryland, 1891.—Attorney at Law, Baltimore.

Robert Tunstall Taylor, M. D., University of Virginia, 1891.—Physician, Baltimore.

Walter Herron Taylor, LL. B., Univ. of Virginia, 1891.—Attorney at Law, Norfolk, Va.

Winfield Scott Thomas, Professor, Chaffee Coll., 1889-90.—Superintendent of Schools, San Bernardino, Cal.

Harry Maas Ullmann, Ph. D., 1892, Honorary Fellow, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Lehigh University.

Horatio Alanson Warren.—Principal, Dayton (O.) Academy. (36)

1890.

John McEwen Ames.—Detroit, Mich.

William Hand Browne, Jr.—Electrical Engineer, Baltimore.

James Edmund Bryan, Jr., Instructor, Michigan School of Mines, 1891-92, Principal, Houghton (Mich.) High School, 1892-93.—Superintendent of Schools, Litchfield, Ill.

Rev. Ralph Erskine Carson, Allegheny Theol. Sem., 1895, Classical Instructor, Philadelphia, 1890-92.—Missionary in Egypt.

William Henry Carson, LL. B. and A. M., Harvard, 1894.—Attorney at Law, Camden, N. J.

Sydney Million Cone, M. D., Univ. of Pennsylvania, 1893.—Physician, Baltimore.

Vernon Cook, LL. B., Univ. of Maryland, 1892.—Attorney at Law, Baltimore.

Lucius Bradley Dorr, M. D., University of Maryland, 1890.—Physician, Buffalo, N. Y.

Edwin Stanton Faust, Ph. D., Munich, 1893, Assistant, 1894-95.

Ned Arden Flood.—Meadville, Pa.

Herbert Friedenwald.—Philadelphia, Pa.

Fielding Hudson Garrison, M. D., Georgetown Univ., 1893.—Physician, Washington, D. C.

Joseph Philip Gerry.—Instructor in English, Washington (D. C.) High School.

George William Gray, Ph. D., 1895.—Chemist, Standard Oil Co., Whiting, Ind.

Samuel Harris Guggenheimer.—Attorney at Law, New York City.

Daniel Dorsey Guy.—Baltimore.

James Chew Johnston, M. D., Univ. City of New York, 1892.—Physician, New York.

Edward Parkin Keech, Jr., LL. B., Univ. of Maryland, 1892.—Attorney at Law, Baltimore.

Henry McElderry Knower, (F).—Bruce Fellow.

Berwick Bruce Lanier, M. D., Univ. of Maryland, 1892.—Physician, Baltimore.

Sylvan Hayes Lauchheimer, LL. B., Univ. of Maryland, 1892.—Attorney at Law, Baltimore.

Tilghman Brice Marden, M. D., Univ. of Maryland, 1892.—Physician, Baltimore.

George Clarence Morrison, LL. B., Univ. of Maryland, 1893.—Attorney at Law, Balt.

Arthur Alexander Oehm.—Student in Germany.

*Arthur Rosewald Oppenheimer, M. D., Univ. of Pa., 1893. **April* 29, 1895.

Lyman Pierson Powell.—Theological Student, Philadelphia.

Rev. Samuel Guy Snowden, B. D., Drew Theol. Sem., 1893.—Clergyman, Westford, N. Y.

James Ernest Stokes, M. D., Univ. of Maryland, 1892.—Asst. Resident Gynecologist, Johns Hopkins Hospital.

Isaac Lobe Straus, LL. B., University of Maryland, 1892.—Attorney at Law, Balt.

Charles Snowden Watts, LL. B., Univ. of Maryland, 1893.—Attorney at Law, Balt.

William Wallace Whitelock, Ph. D., Munich, 1892.—Baltimore.

William Whitridge.—Baltimore.

Adolph Grant Wolf.—Attorney at Law, Washington, D. C.

Frank Alfred Wolff, Jr., (F), Ph. D., 1893.—Chemist, Agricultural Dept., Washington.

James Homer Wright, M. D., Univ. of Maryland, 1892, A. M., Harvard, 1894, Fellow, Univ. of Pa., 1892-93, Assistant, Harvard, 1893-96.—Pathologist in Chief, Mass. General Hospital, Boston.

Rev. Oscar Woodward Zeigler, Princeton Theol. Sem., 1893, A. M., Princeton, 1894.—Baltimore.

Inazo (Ota) Nitobe, (*extra ordinem*), Ph. D., Halle, 1890.—Professor of Political Economy, etc., Imperial College of Agriculture, Sapporo, Japan. (37)

1891.

Michael Alexander Agelasto, A. M., Columbia, 1893.—Norfolk, Va.

Delano Ames, M. D., Univ. of Maryland, 1892.—Physician, Baltimore.

Thomas Stockham Baker, (F), Ph. D., 1895.—Assistant in German.

Randolph Barton, Jr., LL. B., Univ. of Maryland, 1893.—Attorney at Law, Balt.

Daniel Base, Ph. D., 1895.—Associate Professor of Chemistry, Md. Coll. of Pharmacy.

William Bissing, M. E., Ohio State Univ., 1893.—Asst. Examiner, U. S. Patent Office.

Rev. Frederick Foye Briggs, Crozer Theol. Sem., 1894.—Clergyman, Philadelphia.

Shellman Baer Brown.—Engineer, Balt.

Thomas Morris Brown.—Cleveland, O.

Sidney Hand Browne.—Electrical Engineer, Baltimore.

Henry Andrews Bumstead.—Instructor in Physics, Yale University.

Frank Kenneth Cameron, Ph. D., 1894.—Associate Professor of Chemistry, Catholic University.

Malcolm John Cameron, A. M., St. Francis Xavier (N. Y.), 1892, LL. B. and A. M., Columbia, 1894.—Attorney at Law, N. Y.
George Carey.—Teacher, New York City.
Neilson Poe Carey.—Student, General Theol. Sem., N. Y.
Abraham Cohen, (F), Ph. D., 1894.—Instructor in Mathematics.
Harry Webster Cooke.—Attorney at Law, Denver, Colo.
Arthur Aaron Dembitz.—New York City.
Augustus Kountze Detwiler, M. D., Univ. of Pa., 1894.—Physician, Omaha, Neb.
George W. Dobbin, M. D., Univ. of Maryland, 1894.—Asst. Demonstrator of Obstetrics.
William Francis Gallaway, (F), Ph. D., 1896.—Fellow by Courtesy.
George Henry Heitmuller, M. D., Univ. of Pa., 1894.—Physician, Washington, D. C.
Jacob H. Hollander, (F), Ph. D, 1894.—Instructor in Economics.
Charles McHenry Howard, LL. B., Univ. of Maryland, 1893.—Attorney at Law, Balt.
Reid Hunt, Ph. D., 1896.—Fellow.
Charles William Leverett Johnson, (F).—Fellow by Courtesy.
Henry Webster Keating.—Teacher, Savannah, Ga.
*William Knower, LL. B., Univ. of Maryland, 1893. **December* 27, 1894.
George Lefevre, (F).—Bruce Fellow.
George Milton Linthicum, M. D., Coll. of Phys. and Surg., Balt., 1893.—Demonstrator, Woman's Med. Coll. of Baltimore; Physician, Baltimore.
Hugh Sisson Magruder.—Student of Architecture, Columbia College.
Arthur William McDougall.—General Secretary, Associated Charities, Orange, N. J.
Rev. Whitford L. McDowell.—Clergyman, Annapolis, Md.
James Farnandis Mitchell.—Student of Medicine.
Archibald Campbell Murray.—Baltimore.
Charles Fairbank Painter, M. D., Harvard, 1895.—Asst. Resident Physician, Mass. General Hospital, Boston.
Alfred Wilmot Pleasants.—Baltimore.
Alfred Magill Randolph, Jr.—Electrician, Pittsburg, Pa.
William Ferdinand Rittler.—Baltimore.
Charles James Search, M. D., Univ. of Wooster, 1892.—Physician, Brooklyn, N. Y.
Alfred Jenkins Shriver, LL. B., Univ. of Maryland, 1893, A. M., Loyola, 1894.—Attorney at Law, Baltimore.
Rev. James Lawrenson Smiley.—Clergyman, Chaptico, Md.
Samuel King Smith, LL. B., Univ. of Maryland, 1893.—Attorney at Law, Baltimore.
Daniel Gurden Stevens, Jr., (F), Ph. D., 1894.—Student, Crozer Theological Seminary.
Charles Morton Stewart, Jr.—Baltimore.
William Stuart Symington, Jr., Ph. D., 1895, Assistant Professor, Leland Stanford, 1894-95.—Professor of Romance Lang., Amherst.
Matthew Möller Johnson Vea.—Stoughton, Wis.
Charles Joseph West.—Kingfisher, Oklahoma.
Charles Francis Woods, Jr.—Graduate Student.
Rev. Edward L. Watson.—Clergyman, Minneapolis, Minn. (50)

1893.

Harry Adler, M. D., Univ. of Maryland, 1895.—Physician, Baltimore.
Newton Diehl Baker, Jr., LL. B., Washington and Lee, 1894.—Washington, D. C.
Charles Gambrill Baldwin, LL. B., Univ. of Maryland, 1895.—Attorney at Law, Baltimore.
Edwin Bernhard Behrend, M. D., Georgetown, 1894.—Physician, Washington, D. C.
Lunsford Emory Bennett.—Student, Drew Theological Seminary.
Arthur Fisher Bentley, (F), Ph. D., 1895.—Docent in Sociology, Univ. of Chicago.
George Edward Boynton.
Thomas Richardson Brown.—Student of Medicine.
Alfred Cookman Bryan.—Graduate Student.
Charles Weathers Bump.—Baltimore.
William Calvin Chesnut, LL. B., Univ. of Maryland, 1894.—Attorney at Law, Balt.
John Edwin Davis, LL. B., Univ. of Maryland, 1894.—Attorney at Law, Baltimore.
Henry Haywood Glassie.—Attorney at Law, Washington, D. C.
Leon Emanuel Greenbaum, LL. B., Univ. of Maryland, 1895.—Attorney at Law, Balt.
James Wesley Harvey, Jr., LL. B., Univ. of Maryland, 1893.—Baltimore.
William August Haussmann, (F) Ph. D., 1895.—Instructor in German, Petersburg, Va.
Jose Lewis Hirsh, M. D., University of Maryland, 1895.—Physician, Baltimore.
Morris James.—Classical Instructor, San Bernardino, Cal.

Hugh Judge Jewett, Jr., LL. B., Univ. of Maryland, 1894.—Attorney at Law, Balt.
Theodore Woolsey Johnson.—Student, Stevens Institute of Technology.
John Holladay Latané, Ph. D., 1895.—Fellow by Courtesy.
Edward Jaquelin L'Engle.—Attorney at Law, Jacksonville, Fla.
Earl Perkins Lothrop, M. D., Niagara Univ., 1894.—Physician, Buffalo, N. Y.
Charles Whitney Mixter, A. M., Harvard, 1893.—Graduate Student, Harvard.
Walter Alexander Montgomery.—Graduate Student.
James Flack Norris, (F), Ph. D., 1895.—Assistant in Chemistry, Mass. Inst. of Technology.
Thomas Dobbin Penniman.—Graduate Student.
Charles William Peppler.—Fellow.
Albert Moore Reese.—Graduate Student.
William Miller Roberts.—Student of Medicine, University of Maryland.
Abram Barr Snively, M. D., Univ. of Pa., 1895.—Physician, Waynesboro, Pa.
John Sargent Stearns, M. D., Georgetown, 1894.—Physician, Washington, D. C.
Charles Daniel Steenken.—Student, College of Physicians and Surgeons, N. Y.
Leopold Stern.—Electrical Engineer, Baltimore.
Lester Latham Stevens, LL. B., Univ. of Maryland, 1894.—Attorney at Law, Baltimore.
Gustav Lürman Stewart.—Baltimore.
John Stewart, Jr.—Baltimore.
Redmond Conyngham Stewart, LL. B., Univ. of Maryland, 1894.—Attorney at Law, Baltimore.
Arthur Bertram Turner.—Teacher, Kennett Square, Pa.
Harold John Turner.—Teacher, Philadelphia, Pa.
Richard Henry Wilson, Jr.—Graduate Student. (41)

1893.

John Robert Abercrombie, M. D., Univ. of Maryland, 1895.—Physician, Baltimore.
Adolph Hall Ahrens.—Graduate Student.
Theodore George Ahrens.
Delaware Clayton Andre, LL. B., Univ. of Maryland, 1894.—Attorney at Law, Baltimore.
Frank Andrews, Teacher, 1893-95.—Graduate Student.
William Steenbergen Blackford.—Baltimore.
George Stewart Brown, LL. B., Univ. of Maryland, 1895.—Attorney at Law, Balt.
William Lawrence Clark.—Baltimore.
Frank Angier Clark, Professor, Keachie Coll., La., 1893-94.—Student, Southern Baptist Theol. Sem., Louisville.
Edward Lowell Cox.—Chillicothe, O.
Noah Ernest Dorsey.—Graduate Student.
Howard Blake Dowell, LL. B., Univ. of Maryland, 1895.—Attorney at Law, Balt.
John Hooper Edmondson, LL. B., Univ. of Maryland, 1895.—Attorney at Law, Balt.
Henry Simpson Greenleaf, M. D., Univ. of Pennsylvania, 1895.
Wilmot Griffiss.—Baltimore.
Louis Philip Hamburger.—Student of Medicine.
John Hampden Hazelton.—Attorney at Law, Washington, D. C.
Lloyd Lowndes Jackson, Jr., LL. B., Univ. of Maryland, 1895.—Attorney at Law, Balt.
Millard Langfeld.—Student of Medicine.
John Leypold Griffith Lee, LL. B., Univ. of Maryland, 1894.—Attorney at Law, Baltimore.
Jacob Moses Moses, LL. B., Univ. of Maryland, 1895.—Attorney at Law, Baltimore.
Clayland Mullikin, LL. B., Univ. of Maryland, 1893.—Attorney at Law, Easton, Maryland.
Charles Watson Newhall.—Teacher, Faribault, Minn.
Frederick Bogue Noyes.—Student of Medicine, Northwestern University.
Eugene Lindsay Opie.—Student of Medicine.
Charles Bingham Penrose, Jr.—Baltimore.
Clement Andariese Penrose.—Student of Medicine.
Charles Carroll Schenck.—Graduate Student.
Siegmund Bacharach Sonneborn.—Baltimore.
Morris Ames Soper, LL. B., Univ. of Maryland, 1895.—Attorney at Law, Balt.
Francis Edgar Sparks.—Graduate Student.
Alfred Earnest Speirs, Instructor, Lehigh Univ. Prep. School, 1893-94.—Teacher, Cleveland, O.
Hugo Paul Thieme.—Graduate Student.
Douglas Hamilton Thomas, Jr.—Architect, Boston, Mass.
Edwin Litchfield Turnbull.—Baltimore.
John Ogle Warfield.—Student, Episcopal Theol. Sem., Cambridge, Mass.
Henry Skinner West.—Graduate Student.

Frederick Wallace Wilson.—The Dalles, Oregon.
Leo Wolfenstein.—Cleveland, O.
William Hamilton Kirk, (*extra ordinem*), (F), Ph. D., 1895.—Instructor in Greek, Vanderbilt. (40)

1894.

John Griffith Ames, Jr.—Professor of English, etc., Kenyon College.
William Stevenson Baer.—Student of Medicine.
Adolph Elhart Baker.—Student, Union Theol. Sem., Va.
Walter Baumgarten.—Student of Medicine, St. Louis, Mo.
Arthur Henry Baxter.—Graduate Student.
Ernest Julius Becker.—Graduate Student.
Thomas Pumphrey Benson.—Student of Medicine.
Thomas Fitz Patrick Cameron.—Graduate Student.
Moses S. Cohen.—Student of Law, Univ. of Maryland.
Bernard Milton Cone.—Student of Law, Univ. of Maryland.
Charles Angelo Conrad.—Student of Law, Univ. of Maryland.
Walter Cox.—Student of Medicine.
Percy Miller Dawson.—Student of Medicine.
Eli Frank.—Student of Law, Univ. of Maryland.
Nathaniel Edward Griffin.—Graduate Student.
Benjamin Howell Griswold.—Student of Law, Univ. of Maryland.
Richard Jordan Hancock, Jr.—Student of Law, Washington and Lee Univ.
Stephen Cloud Harry.—Graduate Student.
Thomas Wood Hastings.—Student of Medicine.
Conrad Augustine Hauser.—Student of Theology, Sheboygan, Wis.
Herman Frederick Krafft.—Teacher, New York City.
Harry Taylor Marshall.—Student of Medicine.
George Stevens Maynard.—University Scholar.
Louis Wardlaw Miles.—Student of Medicine, Univ. of Maryland.
William Albert Nitze.—University Scholar.
James Piper.—Student of Law, Univ. of Maryland.
John Eugene Howard Post.
John Hurst Purnell.—Baltimore.
Milton Reizenstein.—Graduate Student.
Frank Roy Ruttar.—Graduate Student.
Simon H. Stein.—Student of Law, Univ. of Maryland.
Emerson H. Strickler.—Chemist, Balt.
Joseph Pembroke Thom, Jr.—Baltimore.
George Harvey Trull.—Student, Princeton Theological Seminary.
Clinton Gambrill Tudor.—Engineer, Marquette, Mich.
Malcolm Van Vechten Tyson.—Student of Law, Univ. of Maryland.
Horace Scudder Uhler.—Graduate Student.
George Talbot Whitfield.—Attorney at Law, Baltimore.
Pere Lethrbury Wickes, Jr.—Student of Law, Univ. of Maryland.
* Chester Clark Wood. * *September* 11, 1895.
James Curtis Ballagh, (*extra ordinem*), Ph. D., 1895.—Assistant in History. (41)

1895.

Wilbur Withrow Ballagh.—Tenafly, N. J.
William Sherman Bansemer.—Student of Law, Univ. of Maryland.
Harry Bissing.—Electrician, Cincinnati, O.
Hanson Briscoe Black.—Student of Law, Frederick, Md.
Charles Henry Hardin Branch.—Student, Princeton Theological Seminary.
George Dobbin Brown.—University Scholar.
Lawrason Brown.—University Scholar; Student of Medicine.
Humphrey Warren Buckler.—Student of Medicine.
William Mack Chowning.—Instructor, High School, Warren, O.
Charles Bevan Clark.—Student, Mass. Inst. of Technology.
Gilbert Abraham Coblens.—Baltimore.
Reuben Carll Foster.—Student of Law, Univ. of Maryland.
Frank Taylor Fulton.—Student of Medicine.
James Daton Gallagher.—Student of Medicine.
George Herbert Gray.—Baltimore.
Milton Daniel Greenbaum.—Student of Law, Univ. of Maryland.
Roland Bridendall Harvey.—Baltimore.
George Oscar James.—University Scholar.
Stuart Symington Janney.—University Scholar.
Marcus Kaufman.—Student of Law, Univ. of Maryland.
Charles Alexander Kilvert.—Providence, R. I.

Ernest Pendleton Magruder.—Upper Marlboro, Md.
Edward Spiller Oliver.—University Scholar; Student of Medicine.
John Donaldson Parker.—Student of Law, Univ. of Maryland.
David Sterrett Pindell.—Graduate Student.
Jacob Hall Pleasants, Jr.—University Scholar; Student of Medicine.
Gustav Rudolph Poetter.—Student of Theology, Lancaster, Pa.
John Andrew Robinson.—Baltimore.
Sylvan Rosenheim.—Student of Medicine.
Charles Albert Savage.—Graduate Student.
Edgar Randolph Strobel.—Student of Medicine.
Robert McIlvaine Torrence.—Pittsburg, Pa.
Campbell Easter Waters.—University Scholar.
Rev. Arthur Charles Watkins.—Clergyman, Hannibal, N. Y.
Henry Abel Whitaker.—Teacher, Norristville, Md.
William Whitridge Williams.—Student of Medicine.
William Wingert.—Student of Law, Univ. of Maryland. (37)

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10. Proficients in Applied Electricity, 1888–95.

When the institution is not named, the Johns Hopkins University is to be understood, (F) indicates that the person has held a Fellowship here. *—Died.)

1888.

Cary Talcott Hutchinson, (F), Ph. B., Washington Univ., 1886, Ph. D., 1889.—Consulting Electrical Engineer, New York.
Joseph Lee Jayne, U. S. Naval Acad., 1882.—Lieutenant, U. S. Navy; Bureau of Electricity, Navy Dept, Washington.
Henry Hazlehurst Wiegand, A. B., 1885.—Electrician, Baltimore.
Gilbert Wilkes, U. S. Naval Acad., 1881, Lecturer, Univ. of Wisconsin, 1892–94.—Consulting Electrical Engineer, Detroit. (4)

1890.

William Julian Albert Bliss, A. B., Harvard, 1888, Assistant, 1890–91, Ph. D., 1894, Lecturer, 1894–95, Instructor, Woman's College of Baltimore, 1894–95.—Assistant in Physics.
James Shaler Hodges, A. B., 1886.—Electrical Engineer, Baltimore. (2)

1892.

Ezra Carl Breithaupt.—Consulting Electrical Engineer, Berlin, Ontario.
William Hand Browne, Jr., A. B., 1890.—Electrical Engineer, Baltimore.
*Henry Wakefield Frye, A. B., Colby, 1889, Late Associate Editor, *Electrical World*. **June* 20, 1895.
Norman Crawford McPherson, A. B., Pennsylvania Coll., 1889.—Westinghouse Electric Company, Pittsburg, Pa.
Hugh Pattison.—Electrician, New York.
George Henry Hutton, Jr.—Electrician, Baltimore.
Robert Ernest Hutton.—Electrician, Lexington, Va.
Charles William Waidner.—Special Student.
Arthur Judson Warner, A. B., Marietta, 1889. (9)

1893.

Louis Minturn Aspinwall.—Westinghouse Electric Company, Pittsburg, Pa.
Shellman Baer Brown, A. B., 1891.—Railroad Superintendent, Baltimore.
Sidney Hand Browne, A. B., 1891.—Electrical Engineer, Baltimore.
Eugene Russell Carichoff, A.M., Washington and Lee Univ., 1885.—Sprague Electric Elevator Company, New York.
Howard Waters Doughty.—Fort Wayne Electric Corporation, Baltimore.
Harold Mills Dyar, Ph. B., Marietta, 1888.—Instructor, Marietta College.
Irenus Kittredge Hamilton, S. B., Trinity (Conn.), 1891.—Chicago, Ill.
William Winder Handy, S. B., Haverford, 1891.—Fort Wayne Electric Corporation, Baltimore.
Charles Roy McKay.—Electrical Engineer, Salt Lake City, Utah.
William Robinson Molinard.—Consulting Engineer, Baltimore.
*Arthur Lacy Reese, Electrician, Maryland Steel Company, 1893–94. **March* 12, 1894.
Arthur John Rowland.—Professor of Electrical Engineering, Drexel Institute, Phila.

William Frederick Schulz.—Baltimore.
Robert Isaac Todd.—Railroad Superintendent, Washington, D. C.
John Boswell Whitehead, Jr.—Westinghouse Electric Company, Pittsburg, Pa. (15)

1894.

William Pierce Anderson, A. B., Harvard, 1892.—Student in Paris, France.
John Woodside Corning.—Electrician, Boston, Mass.
Lewis Warrington Cottman.—Electrician, Baltimore.
Harvey Cavendish Darrell.—Baltimore.
Peter Conover Hains, Jr., U. S. Naval Acad., 1893.—Westinghouse Electric Company, Pittsburg, Pa.
Stephen Quentin Hayes, A. B., Georgetown (D. C.), 1892.—Westinghouse Electric Company, Pittsburg, Pa.
Douglas Alexander Howard, U. S. Military Acad., 1878, Captain (retired), U. S. A.
Andrew Ellicott Maccoun.—Electrician, Carnegie Steel Company.
James Warren McCrosky, S. B., Univ. of Nebraska, 1891.—Westinghouse Electric Company, Pittsburg, Pa.
Henry Hutchinson Norris.—Student, Cornell University.
Charles Edward Phelps, Jr.—Electrician, Baltimore.
Alfred Magill Randolph, Jr., A. B., 1891.—Westinghouse Electric Company, Pittsburg, Pa.
Samuel Reber, U. S. Military Acad., 1886, First Lieut., U. S. Army.—Instructor, Signal Service, Fort Riley, Kansas.
Franklin Roberts.—Electrician, Baltimore.
Theodore Straus.—Baltimore.
John Saunders Taylor.—Student, University of Virginia.
Frank McStocker Thomas.—Westinghouse Electric Company, Pittsburg, Pa.
Wallace Durant White.—Electrical Superintendent, Lynchburg, Va.
James Watts Young.—Electrician, New York. (19)

1895.

Harry Bissing, A. B., 1895.—Electrician, Cincinnati, O.
Byron Briggs Brackett, A. B., Syracuse, 1890.—Graduate Student.
Benjamin Harrison Branch.—Instructor in Electrical Engineering, Baltimore Polytechnic Inst.
Edson Fessenden Gallaudet, A. B., Yale, 1893.—Graduate Student.
George Henry Hill, A. B., Williamsport Dickinson Sem., 1891.
Alexander McIver, Jr., A. B., Univ. of North Carolina, 1890.
Joseph Mullen, Jr.—Baltimore.
Charles Reutlinger.—Electrician, Baltimore.
John Jacob Rothermel, A. B., Franklin and Marshall, 1893.—Graduate Student.
Frank Semple Wilcox, South Carolina Military Acad., 1893. (10)

(59)

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11. University (Graduate) Scholars, 1879–95.

(When the institution is not named, the Johns Hopkins University is to be understood. (F) indicates that the person has held a Fellowship here.)

1879–80.

Chasé Palmer, A. B., 1879, (F).
Edward Henry Spieker, A. B., 1879, (F) (2)

1880–81.

William John Alexander, A. B., London, 1876, (F).
Edward Sanford Burgess, A. B., Hamilton, 1879, (F).
Xenos Clark, S. B., Boston Univ., 1878.
William Cathcart Day, A. B., 1880, (F).
Samuel Carroll Derby, A. B., Harvard, 1866.
Henry Laurence Gantt, A. B., 1880.
John Franklin Jameson, A. B., Amherst, 1879, (F).
Charles Herschel Koyl, A. B., Victoria (Ont.), 1877, (F).
William Darnell MacClintock, A. B., Kentucky Wesleyan, 1878.
Harry Fielding Reid, A. B., 1880, (F).
Henry Newlin Stokes, S. B., Haverford, 1878, (F). (11)

1881–82.

Buel Preston Colton, A. B., Amherst, 1874.
Ellery William Davis, S. B., Univ. of Wisconsin, 1879, (F).

William Scott Fleming, A. B., Davidson, 1878, (F).
William Henry Howell, A. B., 1881, (F).
William Darnell MacClintock, A. B., Kentucky Wesleyan, 1878.
Chalmers Colin Norwood, A. B., Davidson, 1878.
William Albert Noyes, A. B., Iowa, 1879.
Charles Albert Perkins, A. B., Williams, 1879, (F).
William Cleveland Thayer, A. B., Columbia. 1876.
Louis Webb Wilhelm, A. B., 1880, (F).
(10)

1882–83.

Gustav Bissing, A. B., 1882, (F).
James Reynolds Duggan, A. B., Mercer, 1877, (F).
Hans Carl Günther von Jagemann, Naumburg Gymnasium, 1876, (F).
Charles William Emil Miller, A. B., 1882, (F).
Charles Albert Perkins, A. B., Williams, 1879, (F).
Burr James Ramage, A. B., Newberry, 1880.
Lewis Tebbetts Stevens, A. B., 1882. (F).
Lewis Webb Wilhelm, A. B., 1880, (F).
(8).

1883–84.

Ethan Allen Andrews, Ph. B., Yale, 1881, (F).
Edward Webster Bemis, A. B., Amherst, 1880.
Frank Donaldson, Jr., A. B., Harvard, 1879.
Homer Winthrop Hillyer, S. B., Univ. of Wisconsin, 1882, (F).
Frederic Schiller Lee, A. B., St. Lawrence Univ., 1878, (F).
Gonzalez Lodge, A. B., 1883, (F).
Albert Gallatin Palmer, A. B., 1882, (F).
Ernest Mondell Pease, A. B., Univ. of Colorado, 1882, (F).
Burr James Ramage, A. B., Newberry, 1880.
Albert Shaw, A. B., Iowa College, 1879.
Albert Harris Tolman, A. B., Williams, 1877, (F).
Arthur Yager, A. B., Georgetown, (Ky.), 1879. (12)

1884–85.

Cyrus Adler, A. B., Univ. of Pennsylvania, 1883, (F).
David Barcroft, Ph. B., Univ. of California, 1882, (F).
William Shirley Bayley, A. B., 1883, (F).
Davis Rich Dewey, A. B., Univ. of Vermont, 1879, (F).
Albert E. Egge, A. B., Luther, 1879, (F).
William Lindsay Glenn, A. B., 1884.
Joseph Jastrow, A. B., Univ. of Pennsylvania, 1882, (F).
George Theophilus Kemp, A. B., 1883, (F).
Gonzalez Lodge, A. B., 1883, (F).
Moses Slaughter, A. B., Indiana Asbury, 1883, (F).
Charles Baker Wright, A. B., Buchtel, 1880, (F). (11)

1885–86.

Richard Eugene Burton, A. B., Trinity (Conn.), 1883.
John Pendleton Campbell, A. B., 1885, (F).
Melvin Elliott Crowell, A. B., Univ. of Rochester, 1879.
Charles Graham Dunlap, A. B., Ohio Wesleyan, 1883.
Edward Stiles Elliott, A. B., Univ. of the South, 1884.
Milton Haight, A. B., Toronto, 1884, (F).
Charles Willard Hayes, A. B., Oberlin, 1883, (F).
Junius Moore Horner, A. B., 1885.
Charles Morris Howard, A. B., 1884.
George Benjamin Hussey, A. B., Columbia, 1884, (F).
Joseph Hoeing Kastle, S. B., Kentucky State, 1884, (F).
James Albert Loane, A. B., 1885.
John Ernst Matzke, A. B., Hope, 1882.
William Ridgely Orndorff, A. B., 1884, (F).
John Roaf Wightman, A. B., Toronto, 1871, (F).
Henry Van Peters Wilson, A. B., 1883, (F).
(16)

1886–87.

Joseph Sweetman Ames, A. B., 1886, (F).
Wilson Lloyd Bevan, A. B., 1886.
Richard Newman Brackett, A. B., Davidson, 1883.
Walter Bliss Canfield, A. B., 1884.
Henry Clarke, A. B., London, 1873, (F).
John Daniel, A. B., Univ. of Alabama, 1884.
William Snyder Eichelberger, A. B., 1876, (F).
Harry English, A. B., 1886.
Henry Rushton Fairclough, A. B., Toronto, 1883, (F).
Abraham Flexner, A. B., 1886.
William Curns Lawrence Gorton, A. B., 1886, (F).
Joseph Edward Harry, A. B., 1886, (F).
Theodore Hough, A. B., 1886, (F).
Frank Gaylord Hubbard, A. B., Williams, 1880.
Percy Meredith Hughes, A. B., 1886.
Archibald MacMechan, A. B., Toronto, 1884, (F).

Herbert William Magoun, A. B., Iowa College, 1879, (F).
Thomas McCabe, A. B., 1886, (F).
John Hanson Thomas McPherson, A. B., 1886, (F).
John Leverett Moore, A. B., Princeton, 1881, (F).
Edmund Clark Sanford, A. B., Univ. of California, 1883, (F).
Charles Lee Smith, S. B., Wake Forest, 1884, (F).
William Flood Smith, A. B., 1886.
John Whitridge Williams, A. B., 1886.
Henry Van Peters Wilson, A. B., 1883, (F).
Allan Chase Woods, A. B., 1886.
Frederick George Young, A. B., 1886.

(27)

1887-88.

Charles McLean Andrews, A. B., Trinity, 1884, (F).
Edward Carey Applegarth, A. B., 1887, (F).
Richard Howard Bayard, A. B., 1887.
William Merriam Burton, A. B., Adelbert, 1886, (F).
Morgan Callaway, Jr., A. B., Emory, 1881, (F).
Charles Edward Coates, Jr., A. B., 1887.
Paul Joseph Dashiell, A. B., 1887.
Alfred Robert Louis Dohme, A. B., 1886.
George Peter Dreyer, A. B., 1887, (F).
Edwin Whitfield Fay, A. M., Southwestern Presbyterian, 1883, (F).
Julius Friedenwald, A. B., 1887.
Adam Capen Gill, A. B., Amherst, 1884, (F).
Jay Cæsar Guggenheimer, A. B., 1887.
Franz Otto Karl Hoffmann, A. B., 1887.
Thomas Logie, A. B., Toronto, 1887, (F).
Robert Milligan McLane, Jr., A. B., 1887.
Daniel Alexander Murray, A. B., Dalhousie, 1884, (F).
John Martin Pierce, A. B., Washington Univ., 1886.
John Charles Robertson, A. B., Toronto, 1883.
Shozaburo Watase, S. B., Sapporo, 1884, (F).

(20)

1888-89.

Henry Harold Ballard, A. B., 1888.
Edward Ambrose Bechtel, A. B., 1888, (F).
James William Black, A. B., 1888.
John Broughton Daish, A. B., 1888.
William Levering Devries, A. B., 1888, (F).
Alfred Robert Louis Dohme, A. B., 1886.
Hermann Louis Ebeling, A. B., 1882, (F).
Raleigh Colston Gildersleeve, A. B., 1888.
Charles Jaques Goodwin, A. B., Bowdoin, 1887, (F).
Walter Jones, A. B., 1888.
Charles Day Lanier, A. B., 1888.
Hiram Benjamin Loomis, A. B., Trinity (Conn.), 1885, (F).
John Hanson Thomas McPherson, A. B., 1886, (F).
William Howard Miller, A. B., 1888.
George Neville Moore, A. B., 1888.
Thomas Hunt Morgan, S. B., Kentucky State, 1886, (F).
Charles Lane Poor, S. B., Coll. of the City of New York, 1886, (F).
Frank Eugene Reader, A. B., 1888.
Louis Rettger, A. B., 1888.
Charles Hunter Ross, S. B, Alabama Agricultural, 1886, (F).
Joseph Samuel Shefloe, A. B., Luther, 1885, (F).
Charles Edmund Simon, A. B., 1888.
Robert Benson Steele, A. B., Univ. of Wisconsin, 1888, (F).
Bert John Vos, A. B., Michigan, 1888, (F).
Edward Lucas White, A. B., 1888.
John White, Jr., A. B., 1888, (F).
Westel Woodbury Willoughby, A. B., 1888, (F).
William Franklin Willoughby, A. B., 1888.

(28)

1889-90.

William Wilson Baden, A. B., 1881, (F).
Adolph Bernhard, A. B., 1889.
Robert Paine Bigelow, S. B., Harvard, 1887, (F).
Charles Cotton Blackshear, A. B., Mercer, 1881.
Frank Barnum Culver, A. B., 1889.
Richard Edward Edes, A. B., 1889.
Daniel Nathan Eisendrath, A. B., 1889.
Albert Bernhardt Faust, A. B., 1889. (F).
Henry Torsey Fernald, S. B., Maine State, 1885.
George Houghton Gilman, A. B., Columbia, 1887, (F).
Thomas Perrin Harrison, S. C. Military Academy, 1888, (F).
William Isaac Hull, A. B., 1889.
Harry Clary Jones, A. B., 1889, (F).
George Charles Keidel, A. B., 1889, (F).
Charles Rollin Keyes, S. B., Iowa Univ. 1887,(F).
Edwin Seelye Lewis, A. B., Wabash, 1888, (F).
Arthur Stanley Mackenzie, A. B., Dalhousie, 1885, (F).
Wilfred Pirt Mustard, A. B., Toronto, 1886, (F).
Barker Newhall, A.B., Haverford, 1887,(F).

Leonard Magruder Passano, A. B., 1889.
Brantz Mayer Roszel, A. B., 1889, (F).
Bernard Christian Steiner, A. B., Yale, 1888, (F).
Westel Woodbury Willoughby, A. B., 1888, (F). (28)

1890-91.

Julius Blume, Münster Academy, Germany, (F).
James Edmund Bryan, Jr., A. B., 1890.
Ralph Erskine Carson, A. B., 1890.
William Henry Carson, A. B., 1890.
Vernon Cook, A. B., 1890.
Paul Joseph Dashiell, A. B., 1887.
Albert Bernhardt Faust, A. B., 1889, (F).
William Ritchie Fraser, A. B., Dalhousie, 1882.
Samuel Harris Guggenheimer, A. B., 1890.
Ross Granville Harrison, A. B., 1889, (F).
Harry Clary Jones, A. B., 1889, (F).
Francis Plaisted King, A. B., Colby, 1890. (F).
Sylvan Hayes Lauchheimer, A. B., 1890.
Frank Jewett Mather, Jr., A. B., Williams, 1889, (F).
Michael Andrew Mikkelsen, A. B., Luther, 1886, (F).
Lyman Pierson Powell, A. B., 1890.
Brantz Mayer Roszel, A. B., 1889, (F).
William Amasa Scott, A.B., Rochester, 1886.
George Owen Squier, U. S. Military Academy, 1887, (F).
Sidney Grant Stacey, A. B., Bowdoin, 1889, (F).
Isaac Lobe Straus, A. B., 1890.
Joseph Moody Willard, A. B., Dartmouth, 1887, (F).
Frank Alfred Wolff, Jr., A. B., 1890, (F).
James Homer Wright, A. B., 1890. (24)

1891-92.

Frank Fayette Almy, S. B. Univ. of Nebraska, 1890.
Burleigh Smart Annis, A. B. Colby, 1885, (F).
William Bissing, A. B., 1891.
Melvin Brandow, A. B., Rutgers, 1888, (F).
Henry Andrews Bumstead, A. B., 1891.
Abraham Cohen, A. B., 1891, (F).
Wallace Stedman Elden, A. B., Bowdoin, 1889.
Harry Max Ferren, A. B., Western Univ. of Pa., 1891, (F).
William Francis Gallaway, A. B., 1891, (F).
Henry Stewart Gane, A. B., Amherst, 1891, (F).
Jacob H. Hollander, A. B., 1891, (F).
David Hull Holmes, A. B., Ohio Wesleyan, 1885, (F).
James Alton James, B. L., University of Wisconsin, 1888, (F).
Charles William Leverett Johnson, A. B., 1891, (F).
George Charles Keidel, A. B., 1889, (F).
Edward Payson Manning, A. B., Brown, 1889, (F).
Lucius Salisbury Merriam, S. B., Vanderbilt, 1889, (F).
Maynard Mayo Metcalf, A. B., Oberlin, 1889, (F).
Will Bush Shober, A. B., St. John's, 1885, and S. B., 1886.
Alfred Jenkins Shriver, A. B., 1891.
Daniel Gurden Stevens, Jr., A. B., 1891, (F).
Martin Bell Stubbs, A. B., Haverford, 1888.
William Stuart Symington, Jr., A. B., 1891.
Frederick Tupper, Jr., A. B., Charleston, 1890, (F).
Charles Joseph West, A. B., 1891. (25)

1892-93.

Edwin Bernhard Behrend, A. B., 1892.
Arthur Fisher Bentley, A. B., 1892, (F).
Thomas Richardson Brown, A. B., 1892.
Alfred Cookman Bryan, A. B., 1892.
William Calvin Chesnut, A. B., 1892.
William Francis Gallaway, A. B., 1891, (F).
Leon Emanuel Greenbaum, A. B., 1892.
William August Haussmann, A.B., 1892, (F).
George Henry Haynes, A.B., Amherst, 1887.
Bert Holmes Hite, M. S., West Virginia Univ., 1890, (F).
Jacob H. Hollander, A. B., 1891, (F).
Thomas Atkinson Jenkins, A. B., Swarthmore, 1887.
Theodore Woolsey Johnson, A. B., 1892.
George Wesley Johnston, A. B., Toronto, 1886, (F).
George Lefevre, A. B., 1891, (F).
William Henry Maltbie, A. B., Ohio Wesleyan, 1890, (F).
Edward Bennett Mathews, A. B., Colby, 1891, (F).
James Flack Norris, A. B., 1892, (F).
Charles William Peppler, A. B., 1892, (F).
Leopold Stern, A. B., 1892.
Alfred William Stratton, A. B., Toronto, 1887, (F).
Frederick Henry Sykes, A. B., Toronto. 1885, (F).
Robert Richardson Tatnall, S. B., Haverford, 1890. (23)

1893–94.

Clarence Griffin Child, A. B., Trinity (Conn.), 1886, (F).
Frank Hollinger Clutz, A. B., Midland, 1892, (F).
Noah Ernest Dorsey, A. B., 1893.
Louis Philip Hamburger, A. B., 1893.
Robert Nelson Hartman, A. B., Pennsylvania Coll., 1891.
George Henry Hill, A. B., Williamsport Dickinson Sem., 1891.
Thomas Franklin Kane, A. B., De Pauw, 1888, (F).
Henry McElderry Knower, A. B., 1890, (F).
Charles Carroll Marden, A. B., 1889.
Henry Ludwell Moore, A. B., Randolph Macon, 1892, (F).
Thomas Francis Moran, A. B., Univ. of Michigan, 1887, (F).
Louis Trenchard More, Ph. B., Washington Univ., 1892, (F).
Charles William Peppler, A. B., 1892, (F).
Louis Marcus Prindle, A. B., Williams, 1887.
Herbert Armistead Sayre, B. E. Univ. of Alabama, 1893.
Charles Carroll Schenck, A. B., 1893.
Francis Edgar Sparks, A. B., 1893.
William Stuart Symington, Jr., A. B., 1891.
Joseph Henry Tudor, C. E., Lafayette, 1886.
Henry Skinner West, A. B., 1893.
Harry Langford Wilson, A. B., Queen's (Ont.), 1887, (F).
Charles Francis Woods, Jr., A. B., 1891. (22)

1894–95.

William Dearborn Ball, S. B., Univ. of Michigan, 1890.
Ernest Julius Becker, A. B., 1894.
Hubert Lyman Clark, A. B., Amherst, 1892.
Henry Edward Ebeling, Gettysburg Theol. Sem., 1888.
William Edwards Henderson, A. B., Univ. of Wooster, 1891.
Charles Hoeing, A. B., Kentucky State Coll., 1890.
Oliver Martin Johnston, A. B., Mississippi Coll., 1890, (F).
Gordon Jennings Laing, A. B., Toronto, 1891, (F).
John Holladay Latane, A. B., 1892.
Ebenezer Mackay, A. B., Dalhousie, 1886, (F).
George Stevens Maynard, A. B., 1894.
John Stokes Morris, S. B., Haverford, 1891.
William Albert Nitze, A. B., 1894.
Milton Reizenstein, A. B., 1894.
Frank Roy Rutter, A. B., 1894.
Charles Carroll Schenck, A. B., 1893.
Frederick George Gottlob Schmidt, Univ. of Erlangen, (F).
John Adams Scott, A. B., Northwestern, 1891, (F).
George Otis Smith, A. B., Colby, 1893, (F).
James Waddell Tupper, A. B., Dalhousie 1891.
William Achenbach Wetzel, A. B., Lafayette, 1891. (21)

The list of the present holders of University Scholarships is given on page 12.

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12. Appointments to Hopkins Scholarships, 1883–96.

Honorary Hopkins Scholars.

1883–84.

William Curns Lawrence Gorton, of Baltimore.
Junius Moore Horner, of North Carolina.
William Flood Smith, of Baltimore.
Allan Chase Woods, of Baltimore. (4)

1884–85.

Edward Carey Applegarth, of Baltimore.
William Curns Lawrence Gorton, of Baltimore.
Jay Cæsar Guggenheimer, of Baltimore.
Junius Moore Horner, of North Carolina.
Theodore Hough, of Virginia.
John Hanson Thomas McPherson, of Baltimore.
William Flood Smith, of Baltimore.
Edward Lucas White, of Baltimore.
Allan Chase Woods, of Baltimore. (9)

1885–86.

Edward Carey Applegarth, of Baltimore.
George Peter Dreyer, of Baltimore.
Raleigh Colston Gildersleeve, of Baltimore.
William Curns Lawrence Gorton, of Baltimore.

Theodore Hough, of Virginia.
John Hanson Thomas McPherson, of Baltimore.
William Howard Miller, of Baltimore.
William Flood Smith, of Baltimore.
Edward Lucas White, of Baltimore.
Westel Woodbury Willoughby, of Virginia.
William Franklin Willoughby, of Virginia.
Allan Chase Woods, of Baltimore. (12)

1886–87.

Edward Carey Applegarth, of Baltimore.
George Peter Dreyer, of Baltimore.
Julius Friedenwald, of Baltimore.
Raleigh Colston Gildersleeve, of Baltimore.
William Howard Miller, of Baltimore.
Edward Lucas White, of Baltimore.
Westel Woodbury Willoughby, of Virginia.
William Franklin Willoughby, of Virginia. (8)

1887–88.

Alfred Bagby, Jr., of Virginia.
Frank Barnum Culver, of Baltimore.
William Levering Devries, of Baltimore.
Raleigh Colston Gildersleeve, of Baltimore.
Harris Hancock, of Virginia.
Walter Jones, of Baltimore.
George Charles Keidel, of Maryland.
William Howard Miller, of Baltimore.
Leonard Magruder Passano, of Baltimore.
Walter Herron Taylor, of Virginia.
Westel Woodbury Willoughby, of Virginia.
William Franklin Willoughby, of Virginia. (12)

1888–89.

Undergraduates.

Ralph Erskine Carson, of Baltimore.
Vernon Cook, of Baltimore.
Frank Barnum Culver, of Baltimore.
Samuel Harris Guggenheimer, of Baltimore.
Harry Clary Jones, of Maryland.
George Charles Keidel, of Maryland.
Sylvan Hayes Lauchheimer, of Baltimore.
Leonard Magruder Passano, of Baltimore.
Brantz Mayer Roszel, of Baltimore.
Walter Herron Taylor, of Virginia. (10)

Graduates.

Charles Edward Brewer, of North Carolina.
John David Epes, of Virginia.
Harris Hancock, of Virginia.
William Asbury Harris, of Virginia.
Mansfield Theodore Peed, of Virginia.
John Cunningham Robertson, of Virginia.
Walter Preston Stradley, of North Carolina.
Stephen Beauregard Weeks, of North Carolina. (8)

1889–90.

Undergraduates.

William Bissing, of Baltimore.
Abraham Cohen, of Baltimore.
Vernon Cook, of Baltimore.
William Francis Gallaway, of Baltimore.
Samuel Harris Guggenheimer, of Baltimore.
Sylvan Hayes Lauchheimer, of Baltimore.
William Stuart Symington, Jr., of Baltimore. (7)

Graduates.

Alexander Mitchell Carroll, of North Carolina.
John David Epes, of Virginia.
Harris Hancock, of Virginia.
William Asbury Harris, of Virginia.
Joseph Rufus Hunter, of North Carolina.
Henry Read McIlwaine, of Virginia.
James Randlett Monroe, of North Carolina.
George Petrie, of Virginia.
Edward Briggs Rawson, of Virginia.
Charles Alphonso Smith, of North Carolina.
Walter Preston Stradley, of North Carolina.
Stephen Beauregard Weeks, of North Carolina. (12)

1890–91.

Undergraduates.

William Bissing, of Baltimore.
Thomas Richardson Brown, of Baltimore.
Abraham Cohen, of Baltimore.
William Francis Gallaway, of Baltimore.
Theodore Woolsey Johnson, of Baltimore.
Charles William Peppler, of Baltimore.
Daniel Gurden Stevens, Jr., of Baltimore. (7)

Graduates.

Alfred Bagby, Jr., of Virginia.
Alexander Mitchell Carroll, of North Carolina.
William Richard Grey, of North Carolina.
Harris Hancock, of Virginia.
Lancelot Minor Harris, of Virginia.
William Asbury Harris, of Virginia.
Joseph Rufus Hunter, of North Carolina.
Exum Percival Lewis, of North Carolina.
Henry Read McIlwaine, of Virginia.
George Petrie, of Virginia.
Charles Alphonso Smith, of North Carolina.
Stephen Beauregard Weeks, of North Carolina. (12)

1891–92.

Undergraduates.

Thomas Richardson Brown, of Baltimore.
Leon Emanuel Greenbaum, of Baltimore.
Eugene Lindsay Opie, of Baltimore.
Charles William Peppler, of Baltimore.
Charles Carroll Schenck, of Baltimore.
Siegmund Bacharach Sonneborn, of Baltimore.
Morris Ames Soper, of Baltimore. (7)

Graduates.

John Spencer Bassett, of North Carolina.
Edwin Winfield Bowen, of Virginia.
Alexander Mitchell Carroll, of North Carolina.
Arthur St. Charles Dunstan, of Virginia.
Joseph Hendren Gorrell, of Virginia.
William Richard Grey, of North Carolina.
Lancelot Minor Harris, of Virginia.
Exum Percival Lewis, of North Carolina.
James Ludwell Lake, of Virginia.
William Joseph Martin, Jr., of North Carolina.
James Henry Pridgen, of North Carolina.
Benjamin Franklin Sharpe, of Virginia. (12)

1892–93.

Undergraduates.

Walter Cox, of Maryland.
Howard Blake Dowell, of Baltimore.
Eli Frank, of Baltimore.
Louis Philip Hamburger, of Baltimore.
Frank Roy Rutter, of Baltimore.
Siegmund Bacharach Sonneborn, of Baltimore.
Henry Skinner West, of Baltimore. (7)

Graduates.

John Spencer Bassett, of North Carolina.
Thomas Leston Blalock, of North Carolina.
Daniel Clifford Branson, of North Carolina.
Eugene Russell Carichoff, of Virginia.
Joseph Hendren Gorrell, of Virginia.
William Richard Grey, of North Carolina.
Lancelot Minor Harris, of Virginia.
James Ludwell Lake, of Virginia.
Solomon Reid McKee, of North Carolina.
Walter Alexander Montgomery, Jr., of North Carolina.
George Shipley, of Virginia.
Frank Suter, of Virginia. (12)

1893–94.

Undergraduates.

Eli Frank, of Baltimore.
Stuart Symington Janney, of Baltimore.
Marcus Kaufman, of Baltimore.
Edward Spiller Oliver, of Baltimore.
Frank Roy Rutter, of Baltimore.
Simon H. Stein, of Baltimore. (6)

Graduates.

James Curtis Ballagh, of Virginia.
Thomas Leston Blalock, of North Carolina.
Charles Raymond Duvall, of Virginia.
Joseph Hendren Gorrell, of Virginia.
Samuel Rivers Hendren, of Virginia.
Joseph Rufus Hunter, of North Carolina.
Alexander McIver, Jr., of North Carolina.
Solomon Reid McKee, of North Carolina.
James Henry Pridgen, of North Carolina.
Robert Somerville Radford, of Virginia.
Ebenezer Leonidas Reid, of North Carolina.
George Shipley, of Virginia. (12)

1894–95.

Undergraduates.

Gilbert Abraham Cobiens, of Baltimore.
Marcus Kaufman, of Baltimore.
Henry Lanahan, of Baltimore.
Arthur Webster Machen, Jr., of Baltimore.
Edward Spiller Oliver, of Baltimore.
John Wesley Richardson Sumwalt, of Baltimore. (6)

Graduates.

James Curtis Ballagh, of Virginia.
Waverley Bayard Daniel, of North Carolina.
Charles Raymond Duvall, of Virginia.
James Robert Harris, of North Carolina.
Samuel Rivers Hendren, of Virginia.
William Jackson Humphreys, of Virginia.
Joseph Rufus Hunter, of North Carolina.
John McLaren McBryde, Jr., of Virginia.
Alexander McIver, Jr., of North Carolina.
Solomon Reid McKee, of North Carolina.
Robert Somerville Radford, of Virginia.
Enoch Walter Sikes, of North Carolina. (12)

1895–96.

Undergraduates.

Frank Ringgold Blake, of Baltimore.
Charles Keyser Edmunds, of Baltimore.
Henry Lanahan, of Baltimore.
Arthur Webster Machen, Jr., of Baltimore.

St. George Leakin Sioussat, of Maryland.
David Emrich Weglein, of Baltimore. (6)

Graduates.

Edward Cooke Armstrong, of Virginia.
Joseph Hockman Bowman, of Virginia.
Julian Alvin Carroll Chandler, of Virginia.
Waverley Bayard Daniel, of North Carolina.
Charles Raymond Duvall, of Virginia.
William Francis Gill, of North Carolina.
Edwin Luther Green, of Virginia.
William App Jones, of North Carolina.
Benjamin Wesley Kilgore, of North Carolina.
Walter Alexander Montgomery, Jr., of North Carolina.
Charles Dabney Ragland, of Virginia.
Enoch Walter Sikes, of North Carolina. (12)

Hopkins Scholars.

1885-86.

Henry Harold Ballard, of Baltimore.
Hamilton McFarland Brown, of Baltimore.
Arthur Lee Browne, of Baltimore.
William Levering Devries, of Baltimore.
William Snyder Eichelberger, of Maryland.
Joseph Edward Harry, of Maryland.
Robert Milligan McLane, Jr., of Baltimore.
Charles Edmund Simon, of Baltimore.
John Whitridge Williams, of Baltimore. (9)

1886-87.

Henry Harold Ballard, of Baltimore.
James William Black, of Baltimore.
Hamilton McFarland Brown, of Baltimore.
Arthur Lee Browne, of Baltimore.
Charles Edward Coates, of Baltimore.
Frank Barnum Culver, of Baltimore.
Paul Joseph Dashiell, of Maryland.
William Levering Devries, of Baltimore.
Albert Bernhardt Faust, of Baltimore.
George Charles Keidel, of Maryland.
Charles Day Lanier, of Baltimore.
Robert Milligan McLane, of Baltimore.
Waldo Newcomer, of Baltimore.
Leonard Magruder Passano, of Baltimore.
Benjamin Bittinger Shreeves, of Baltimore.
Charles Edmund Simon, of Baltimore.
Benjamin Latrobe Weston, of Baltimore. (17)

1887-88.

Henry Harold Ballard, of Baltimore.
Edward Ambrose Bechtel, of Maryland.
James William Black, of Baltimore.
Arthur Lee Browne, of Baltimore.
Sydney Million Cone, of Baltimore.
Vernon Cook, of Baltimore.
Albert Bernhardt Faust, of Baltimore.
Edwin Stanton Faust, of Baltimore.
Samuel Harris Guggenheimer, of Baltimore.
William Isaac Hull, of Baltimore.
Harry Clary Jones, of Maryland.
Henry McElderry Knower, of Baltimore.
Jesse William Lazear, of Baltimore.
George Clarence Morrison, of Baltimore.
Waldo Newcomer, of Baltimore.
Arthur Alexander Oehm, of Baltimore.
Arthur Rosewald Oppenheimer, of Baltimore.
Charles Edmund Simon, of Baltimore.
John White, Jr., of Maryland. (19)

1888-89.

Undergraduates.

Daniel Base, of Baltimore.
William Bissing, of Baltimore.
Walton Bolgiano, of Maryland.
Abraham Cohen, of Baltimore.
Sydney Million Cone, of Baltimore.
Albert Bernhardt Faust, of Baltimore.
Edwin Stanton Faust, of Baltimore.
William Francis Gallaway, of Baltimore.
Jacob H. Hollander, of Baltimore.
William Isaac Hull, of Baltimore.
Charles McHenry Howard, of Baltimore.
Charles William Leverett Johnson, of Baltimore.
Henry McElderry Knower, of Baltimore.
Charles Smith Lewis, of Baltimore.
George Clarence Morrison, of Baltimore.
Clarence Morton Murray, of North Carolina.
Waldo Newcomer, of Baltimore.
Arthur Rosewald Oppenheimer, of Baltimore.
Legh Wilber Reid, of Virginia.
Ralph Robinson, of Maryland.
Benjamin Bittinger Shreeves, of Baltimore.
Alfred Jenkins Shriver, of Baltimore.
William Stuart Symington, Jr., of Baltimore.
William Topping Watson, of Maryland. (24)

Graduates.

Alfred Bagby, Jr., of Virginia.
Edward Briggs Rawson, of Virginia.
John Berkeley Thomas, of Virginia. (3)

1889-90.

Undergraduates.

Thomas Richardson Brown, of Baltimore.
Ralph Erskine Carson, of Baltimore.
Leon Emanuel Greenbaum, of Baltimore.
Jacob H. Hollander, of Baltimore.
Charles William Leverett Johnson, of Baltimore.
Theodore Woolsey Johnson, of Baltimore.
Charles William Peppler, of Baltimore.
Alfred Jenkins Shriver, of Baltimore.
Leopold Stern, of Baltimore.
Daniel Gurden Stevens, Jr., of Baltimore.
Isaac Lobe Straus, of Baltimore. (11)

Graduates.

Alfred Bagby, Jr., of Virginia.
William Richard Grey, of North Carolina.
Franklin Deaderick Love, of North Carolina.
Frank Suter, of Virginia.
John Thorne, of North Carolina. (5)

1890-91.

Undergraduates.

Lunsford Emory Bennett, of Maryland.
William Calvin Chesnut, of Baltimore.
Howard Blake Dowell, of Baltimore.
Louis Philip Hamburger, of Baltimore.
Jacob H. Hollander, of Baltimore.
Walter Alexander Montgomery, Jr., of North Carolina.
Eugene Lindsay Opie, of Baltimore.
Charles Carroll Schenck, of Baltimore.
Morris Ames Soper, of Baltimore.
William Stuart Symington, Jr., of Baltimore.
Robert Isaac Todd, of Virginia. (11)

Graduates.

Arthur Talmage Abernethy, of North Carolina.
Thomas Leston Blalock, of North Carolina.
Daniel Clifford Branson, of North Carolina.
Edwin Winfield Bowen, of Virginia.
John Bascom Crenshaw, of Virginia.
James Robert Hankins, of North Carolina.
James Ludwell Lake, of Virginia.
Franklin Deaderick Love, of North Carolina.
James Constantine Maake, of North Carolina.
William Lander Weber, of North Carolina. (10)

1891-92.

Undergraduates.

William Calvin Chesnut, of Baltimore.
Moses S. Cohen, of Baltimore.
Howard Blake Dowell, of Baltimore.
Eli Frank, of Baltimore.
Arthur Hancock, of Virginia.
Richard Jordan Hancock, Jr., of Virginia.
Walter Alexander Montgomery, Jr., of North Carolina.
Clayland Mullikin, of Maryland.
James Flack Norris, of Baltimore.
Milton Reizenstein, of Baltimore.
Frank Roy Rutter, of Baltimore.
Leopold Stern, of Baltimore.
Robert Isaac Todd, of Virginia.
Henry Skinner West, of Baltimore.
John Boswell Whitehead, Jr., of Virginia. (15)

Graduates.

Eugene Russell Carichoff, of Virginia.
John David Epes, of Virginia.
Hugh Alexander Grey, of North Carolina.
Benjamin Sidney Mitchell, of North Carolina.
James King Stringfield Ray, of North Carolina.
George Shipley, of Virginia.
Frank Suter, of Virginia.
John Berkeley Thomas, of Virginia.
John Thorne, of North Carolina. (9)

1892-93.

Undergraduates.

Gilbert Abraham Coblens, of Baltimore.
Arthur Hancock, of Virginia.
Stuart Symington Janney, of Baltimore.
Marcus Kaufman, of Baltimore.
Edward Spiller Oliver, of Baltimore.
Milton Reizenstein, of Baltimore.
Charles Carroll Schenck, of Baltimore.
Morris Ames Soper, of Baltimore.
Simon H. Stein, of Baltimore.
Campbell Easter Waters, of Baltimore. (10)

Graduates.

James Curtis Ballagh, of Virginia.
Carl Mead Best, of Virginia.
Ernest Taylor Bynum, of North Carolina.
Charles Raymond Duvall, of Virginia.
Robert Lindsay Fritz, of North Carolina.
Eldridge Burwell Hatcher, of Virginia.
Egbert Watson Magruder, of Virginia.
John McLaren McBryde, Jr., of Virginia.

Henry Read McIlwaine, of Virginia.
Benjamin Sidney Mitchell, of North Carolina.
James Henry Pridgen, of North Carolina.
Alfred Magill Randolph, Jr., of Virginia.
Ebenezer Leonidas Reid, of North Carolina.
Benjamin Franklin Sharpe, of Virginia.
John Archer Silver, of Maryland.
Thomas Hardy Taliaferro, of Virginia.
(16)

1893-94.

Undergraduates.

Ernest Julius Becker, of Baltimore.
Gilbert Abraham Coblens, of Baltimore.
Walter Cox, of Maryland.
Robert Lacy, of Baltimore.
Henry Lanahan, of Baltimore.
St. George Leakin Sioussat, of Maryland.
John Wesley Richardson Sumwalt, of Baltimore.
Campbell Easter Waters, of Baltimore.
John Montgomery West, of Baltimore.
Horace Scudder Uhler, of Baltimore.
(10)

Graduates.

Edward Cooke Armstrong, of Virginia.
Benjamin William Arnold, Jr., of Virginia.
Matthew Hartwell Arnold, of Virginia.
Julian Alvin Carroll Chandler, of Virginia.
Waverley Bayard Daniel, of North Carolina.
Joseph Volney Lewis, of North Carolina.
Charles Neill McBryde, of Virginia.
John McLaren McBryde, Jr., of Virginia.
Alfred Magill Randolph, Jr., of Virginia.
Benjamin Franklin Sharpe, of Virginia.
John Archer Silver, of Maryland.
Thomas Hardy Taliaferro, of Virginia.
Louis Napoleon Whealton, of Virginia.
(13)

1894-95.

Undergraduates.

Frank Ringgold Blake, of Baltimore.
Milton Daniel Greenbaum, of Baltimore.
John Edgar Knipp, of Baltimore.
William Kurrelmeyer, of Baltimore.
Josiah Morris Slemons, of Maryland.
William Fisher Wallis, of Baltimore.
Campbell Easter Waters, of Baltimore.
David Emrich Weglein, of Baltimore.
Thom Dudley Williams, of Baltimore.
(9)

Graduates.

Thomas Marion Anderson, of Virginia.
Edward Cooke Armstrong, of Virginia.
Benjamin William Arnold, Jr., of Virginia.
Killis Campbell, of Virginia.
Julian Alvin Carroll Chandler, of Virginia.
Edmund Pendleton Cooke, of Virginia.
Matthew Maury Corbin, of Virginia.
William Francis Gill, of North Carolina.
Edwin Wexler Kennedy, of North Carolina.
Egbert Watson Magruder, of Virginia.
Francis Mallory, of Virginia.
Charles Dabney Ragland, of Virginia.
Ebenezer Emmet Reid, of Virginia.
John Archer Silver, of Maryland.
Herbert Meloy Smith, of North Carolina.
Thomas Hardy Taliaferro, of Virginia.
Louis Napoleon Whealton, of Virginia.
Frank Semple Wilcox, of North Carolina.
(18).

1895-96.

Undergraduates.

Charles Edward Caspari, of Baltimore.
Henry Wireman Cook, of Baltimore.
Ralph Duffy, of Baltimore.
John Edgar Knipp, of Baltimore.
Henry John Lucke, of Baltimore.
Josiah Morris Slemons, of Maryland.
Victor Edgeworth Smith, of Baltimore.
Albert Gad Stidman, of Baltimore.
John Wesley Richardson Sumwalt, of Baltimore.
Joseph Nathan Ulman, of Baltimore.
(10)

Graduates.

Benjamin William Arnold, Jr., of Virginia.
Charles Benton Cannaday, of Virginia.
Killis Campbell, of Virginia.
Matthew Maury Corbin, of Virginia.
Christopher Cridlin Crittenden, of Virginia.
Reginald Harvey Griffith, of North Carolina.
James Robert Hankins, of North Carolina.
Charles Collier Holden, of North Carolina.
Edwin Wexler Kennedy, of North Carolina.
Guy Carleton Lee, of North Carolina.
Francis Mallory, of Virginia.
Charles William Prettyman, of North Carolina.
Ebenezer Emmet Reid, of Virginia.
James Walker Reid, of North Carolina.
Garnett Ryland, of Virginia.
Robert Frederick Whitehead, of Virginia.
(16)

WASHINGTON SCHOLARS.

1885–86.
John Broughton Daish.
Percy Meredith Hughes.

1886–87.
John Broughton Daish.
John Bright Macaulay.

1887–88.
John Broughton Daish.
Richard Edward Edes.

1888–89.
Richard Edward Edes.

1889–90.
Fielding Hudson Garrison.

1890–91.
Delano Ames.
Henry Haywood Glassie.

1891–92.
Edwin Bernhard Behrend.
Henry Haywood Glassie.

1892–93.
Frank Andrews.
George Stevens Maynard.

1893–94.
John Griffith Ames, Jr.
George Stevens Maynard.

1894–95.
Hanson Briscoe Black.
Monroe Luchs.

1895–96.
Herbert Henry Adams.
Monroe Luchs.

Recipients of Prizes, 1887-96.

Literary Prizes.

1887.

Richard Eugene Burton, A. B. $100
James Cummings, A. M. $100

John Marshall Prize.

1892.

Henry Carter Adams, Ph. D.
Charles Herbert Levermore, Ph. D.
John Martin Vincent, Ph. D.
Woodrow Wilson, Ph. D.

1893.

Charles McLean Andrews, Ph. D.

1894.

Amos Griswold Warner, Ph. D.

1895.

Albert Shaw, Ph. D.

Scharf-Birney Prize.

1892.

Frank Wilson Blackmar, Ph. D. $100

Institutional History Prize.

1892.

Charles McLean Andrews, Ph. D. $50

Prizes for English Composition.

1. *Offered to Matriculated Students.*

1894.

Wilbur Withrow Ballagh. $100

2. *Offered to Matriculated Students entering in* 1893.

1894.

Charles Burnet Torsch $50
Arthur Webster Machen, Jr. $20

3. *Offered to Bachelors of Arts of this University.*

1895.

William Stuart Symington, Jr., A. B., 1891. ..... $100

Prize for Public Speaking.

Offered to Matriculated Students.

1895.

Arthur Charles Watkins $50

Prize Offered to Students of Chemistry.

1895.

Ebenezer Emmet Reid, A. M. $100

12. Libraries.

1. The University Library numbers 77,000 volumes, selected with special reference to the instruction here given. It is arranged in several collections, of which these are the chief:

General Reference.	Classical.
Historical and Political.	Oriental Languages.
Mathematical and Physical.	Romance and Teutonic Languages.
Chemical.	The McCoy Art Library.
Biological.	Library of Southern History.
	Medical.

The reference library and reading room is open daily from 9 a. m. to 6 p. m.; the other rooms in accordance with special regulations.

The Library receives the publications of the leading scientific societies of the world and the chief literary and scientific periodicals. The whole number of serials received exceeds one thousand. This list is supplemented by those of the Peabody Institute and other institutions, so that the whole number of journals accessible (exclusive of ephemeral publications) exceeds twelve hundred. Important books are received by the library as soon as published, by purchase or by courtesy of dealers.

2. The Peabody Library is a choice collection of books purchased since 1866. It is particularly full in academic transactions, long historical series, and costly illustrated books. It numbers 125,000 volumes, well bound, catalogued, and arranged. It is open daily, without charge, from 9 a. m. to 10.30 p. m.

3. The Enoch Pratt Free Library numbers over 166,000 volumes, and is open daily, without charge.

4. The Maryland Historical Society Library contains 30,000 volumes of historical works, and is open daily.

5. Other libraries of Baltimore are the New Mercantile Library (40,000 volumes), the Bar Library (14,000 volumes), the Medical and Chirurgical Library (6,600 volumes), the Maryland Episcopal Library (20,000 volumes), and the Library of the Maryland Institute (21,000 volumes).

6. Washington is so near that its museums and libraries may be easily visited. Among the chief institutions of interest to students are these:

The Smithsonian Institution and National Museum.
The Library of Congress.
The Army Medical and Surgical Museum and Library.
The U. S. Coast and Geodetic Survey.
The U. S. Geological Survey.
The U. S. Naval Observatory.
The Libraries of the Departments and Bureaus.
The Corcoran Art Gallery.

13. Regulations of the Treasurer's Office.

I. The Treasurer's Office is open daily from 9 a. m. to 4.15 p. m.

II. All bills should be presented at that place endorsed as correct by the person under whose authority the expense has been incurred.

III. No member of the Academic Staff is allowed to incur a bill in the name of the University, unless authority is given for the same by the Trustees, in advance—either as an item in the annual budget, or as a special appropriation. Blank forms of application are provided for special requisitions.

IV. Orders for books and apparatus to be imported from Europe will not be considered authorized unless countersigned by the President or the Treasurer of the University.

All goods must be consigned to and addressed "Johns Hopkins University, Baltimore, Md." Goods for other parties (societies or individuals) must not be included in the University cases. Invoices, sworn to before the U. S. Consul, must be sent by mail, and a duplicate invoice by the following mail, both addressed to the Johns Hopkins University.

Unless otherwise ordered, goods from Europe should be sent as follows:

From Germany by the North German Lloyd steamers sailing for Baltimore from Bremen; from England by steamship lines from Liverpool to Baltimore; from France and Italy, via Havre and Liverpool.

Printed copies of instructions to shippers, which can be obtained at the Treasurer's Office, should in all cases be enclosed with the orders.

V. The Treasurer's Office will make purchases, at wholesale rates, of supplies which are required for the current needs of the University.

VI. Such pass-books as are authorized by the Treasurer should be presented for balance and settlement every month.

VII. The wages of all persons employed by the University will be paid at the Treasurer's Office.

VIII. When C. O. D. packages are expected, previous arrangements should be made for their reception.

IX. Outlays made for individuals (express parcels, postage, telegraph messages, etc.) should be settled at once.

X. An annual allowance is made by the Trustees, in the budget, for such expenses as they approve, and in deciding on the items they are governed by a consideration of the general interests of the University, as well as by the needs of special branches of instruction. Balances to the debit or credit of any account are carried forward to the new account, at the opening of each financial year (September 1). A statement of the amount of the balance and of any additional appropriation will be communicated to the parties severally interested, if requested, after the Trustees' meeting in October.

FRANCIS WHITE,
Treasurer.

14. Publications issued at the Johns Hopkins University.

I. American Journal of Mathematics.

This journal was commenced in 1878, under the editorial direction of Professor Sylvester. It is now conducted by Professor Craig as Editor, with the coöperation of Professor Newcomb. Seventeen volumes of about 400 pages each have been issued, and the eighteenth is in progress. It appears quarterly, in the quarto form. Subscription $5 per year. Single numbers $1.50.

II. American Chemical Journal.

This journal was commenced in 1879, with Professor Remsen as Editor. Seventeen volumes of about 450 pages each have been issued, and the eighteenth is in progress. Ten numbers are issued yearly. Subscription $4 per year. Single numbers 50 cents.

III. American Journal of Philology.

The publication of this journal commenced in 1880, under the editorial direction of Professor Gildersleeve. Sixteen volumes of about 570 pages each have been issued, and the seventeenth is in progress. It appears four times yearly. Subscription $3 per volume. Single numbers $1.

IV. Studies from the Biological Laboratory.

The publication of these papers commenced in 1879, under the direction of Professor Martin, with the assistance of Professor Brooks. Five volumes of about 500 pages, octavo, and 40 plates each, have been completed.

V. Memoirs from the Biological Laboratory.

These monographs are issued, at irregular intervals, under the editorial direction of Professor Brooks. Volume III has just been issued. Price $10.

VI. Studies in Historical and Political Science.

The publication of these papers was begun in 1882, under the editorial direction of Professor H. B. Adams. Thirteen series are now completed and the fourteenth series is in progress. Fourteen extra volumes have also been issued. Subscription $3 per volume.

VII. Johns Hopkins University Circulars.

The University Circulars are published at convenient intervals during the academic year for the purpose of communicating intelligence to the various members of the University in respect to work which is here in progress, as well as for the purpose of promulgating official announcements from the governing and teaching bodies. The publication of the Circulars began in December, 1879, and one hundred and twenty-four numbers have since been issued. Subscription $1 per year. Subscribers to the Circulars will also receive the Annual Register and the Annual Report of the University.

VIII. Contributions to Assyriology and Comparative Semitic Philology.

Professor Paul Haupt of the Johns Hopkins University and Professor Friedrich Delitzsch of the University of Breslau are the Editors of this publication. Volume I. Price $10.00. Volume II. Price $10.50. Volume III is in progress.

IX. The Journal of Experimental Medicine.

The publication of this journal was begun in January, 1896, under the editorial direction of Professor Welch. Price $5 per volume.

X. The Johns Hopkins Hospital Bulletin.

This journal appears monthly and contains papers, reports of cases, etc., by the Medical Faculty of the University and the physicians in the Johns Hopkins Hospital. Price $1 per year.

XI. The Johns Hopkins Hospital Reports.

These Reports contain the larger and more important papers by the Medical Faculty of the University and the physicians in the Hospital. Price $5 per yearly volume.

XII. Annual Report,

presented by the President to the Board of Trustees, reviewing the operations of the University during the past academic year.

XIII. Annual Register,

giving the list of the officers and students, and containing detailed statements as to the regulations and work of the University.

Announcements of proposed lectures, courses of instruction, etc., appear in the University Circulars, or are separately issued as Programmes from time to time.

Copies of the following publications can also be supplied by The Johns Hopkins Press:

Rowland's Photograph of the Normal Solar Spectrum. Set of ten plates mounted on cloth, $20.00; single plates mounted, $2.50.

A New Critical Edition of the Hebrew Text of the Old Testament. Edited by Professor Paul Haupt.

Description of the Johns Hopkins Hospital. By J. S. Billings. 116 pages and 56 plates. 4to. $7.50, cloth.

The Oyster. By W. K. Brooks. 240 pages, 14 plates. 12mo. $1.00, cloth.

The Teaching of the Apostles (complete facsimile text-edition). J. Rendel Harris, Editor. 110 pp. and 10 plates. 4to. $5.00, cloth.

Reproduction in Phototype of a Syriac MS. with the Antilegomena Epistles. Edited by I. H. Hall. 4to. $3.00, paper; $4.00, cloth.

Studies in Logic. By members of the Johns Hopkins University. C. S. Peirce, Editor. 123 pp. 12mo. $2.00.

Geology and Physical Features of Maryland. By G. H. Williams and W. B. Clark. 67 pp. 4to. 16 plates and charts. $1.00.

Geological and Topographical Maps of Baltimore and its Neighborhood. $1.00 each.

The Constitution of Japan, with speeches, etc., illustrating its significance. 48 pp. 16mo. 50 cents.

Essays and Studies. By Basil L. Gildersleeve. 520 pp. small 4to. $3.50, cloth.

Bibliographia Hopkinsiensis. Parts I–VI.

A Monograph on the Genus Salpa. By W. K. Brooks. 400 pp. 4to. 57 plates. $7.50.

A full Catalogue of the journals and books on sale by the Johns Hopkins Press will be sent on application.

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15. Scientific Societies.

1. The Scientific Association, meeting under the presidency of Professor Remsen.

2. The Philological Association, meeting under the presidency of Professor Gildersleeve.

3. The Mathematical Society, of which Professor Craig is the director.

4. The Historical and Political Science Association, of which Professor Adams is the director.

5. A Naturalists' Field Club, which makes weekly excursions during the spring and autumn and holds monthly meetings for the presentation and discussion of papers.

There are also companies which meet weekly in the laboratories for the reading of the scientific journals, and seminaries in several departments of study.

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16. Historical Statement.

The Johns Hopkins University was founded by the munificence of a citizen of Baltimore, Johns Hopkins, who bequeathed the most of his large estate for the establishment of a University and a Hospital. The foundation of the University is a capital in land and stocks, estimated in value at more than $3,000,000; the capital of the Hospital is not less in amount.

1867, August 24.	Incorporation of the Johns Hopkins University.
1870, June 13.	Organization of the Board of Trustees.
1873, December 24.	Death of the Founder [born May 19, 1795].
1874, February 6.	First Business Meeting of the Trustees.
1874, December 30.	Election of a President of the University.
1876, February 22.	Inauguration of the President.
1876, October 3.	Instruction of Students began.
1886, April 26.	Celebration of the Tenth Anniversary.
1889, May 7.	Opening of the Johns Hopkins Hospital.
1893, October 1.	Opening of the Johns Hopkins Medical School.

MATRICULATION EXAMINATIONS, 1896.

Monday, June 8, and Wednesday, September 30.

9–10 a. m.—History.
10–11 a. m.—Science.
11 a. m.–1 p. m.—English.
3 p. m.—Latin.

Tuesday, June 9, and Thursday, October 1.

9 a. m.—Arithmetic and Algebra.
11 a. m.—French and German (*elements*).
3 p. m.—Geometry.

Wednesday, June 10, and Friday, October 2.

9 a. m.—Trigonometry and Analytic Geometry.
3 p. m.—Greek.
3 p. m.—French and German (*minor courses*).
3 p. m.—German (*elements*).

CALENDAR, 1896-97.

The first Examinations for Admission and Matriculation begin Monday, June 8, 1896, at 9 a. m.

Commencement Day falls on Thursday, June 11, 1896.

The present academic year closes June 15, 1896.

The twenty-first academic year begins October 1, 1896, and continues till June 15, 1897.

The autumn Examinations for Admission begin Wednesday, September 30, 1896, at 9 a. m.

The Christmas Recess begins Thursday, December 24, 1896.

Exercises will be resumed Monday, January 4, 1897.

Commemoration Day falls on Monday, February 22, 1897.

The Spring Recess begins Thursday, April 15, and closes Wednesday, April 21, 1897.

STATEMENTS IN RESPECT TO THE COURSES OF INSTRUCTION.

The Faculty of Philosophy in the Johns Hopkins University was organized in 1876 for the instruction of young men in languages, literature, and science.

The Faculty of Medicine was gradually brought together, and in the autumn of 1893 the Johns Hopkins Medical School was fully organized and opened for the instruction of young men and young women who desire to proceed to the degree of Doctor of Medicine.

In the Faculty of Philosophy, the instruction is carried on by university methods and by collegiate methods corresponding with the requirements of students at different stages of their advancement. University instruction is offered to those who have already taken an academic degree, or who have otherwise fitted themselves to pursue advanced courses of study. Collegiate instruction is offered to undergraduates, who have the choice of several prescribed courses of study, all of them leading up to the degree of Bachelor of Arts.

In the Faculty of Medicine, students who have received a liberal education by a course of study that included chemistry, physics, and biology, with French and German, are received; and a four years' systematic course, with special opportunities for laboratory work and for clinical observation, is provided for them. Those who have already received the degree of Doctor of Medicine are admitted as attendants on lectures.

PHILOSOPHICAL FACULTY.

Advanced and graduate students are received with or without reference to their being candidates for a degree, and they are permitted to attend such lectures and exercises as they may individually select. On entering the University they are expected to present their diplomas and certificates from the institutions with which they have been connected, and also letters of introduction. They are not examined for admission by the University, but each instructor satisfies himself of the attainments of those who wish to follow his guidance before admitting them to his classes.

The professors are free to give personal counsel and instruction to those who seek it; books and instruments adapted to investigations and advanced work have been liberally provided; the system of fellowships secures the presence of twenty special students imbued with the university spirit, most of them looking forward to academic careers; seminaries limited to a few advanced students under the guidance of a director have been organized in various subjects; societies devoted to philology, to mathematical, physical, and natural science, and to history and political science, afford opportunities for the presentation of memoirs and original communications, and there are also clubs for the reading and discussion of philological, biological, physical, and chemical papers; during the year courses of lectures are given by resident and non-resident professors on topics to which they have given special attention; the libraries of the Peabody Institute and Maryland Historical Society, founded for the advantage of scholars, are easily accessible; the issuing, under the auspices of the Trustees, of publications devoted to mathematics, chemistry, philology, biology, and history brings the University into advantageous connection with other foundations; and the University reading-room, which is constantly open, is liberally supplied with new and with standard books and with the literary and scientific journals of this and other lands.

Instruction is carried on in the different departments by methods which vary with the nature of the subject and the character and proficiency of the scholars; but in all alike the aim is the same,—that, while the student is becoming familiar

with the work prosecuted and the results attained elsewhere, and is adding to his general intellectual culture, he may be encouraged to become himself an independent and original investigator in his chosen field of labor. Within reasonable limits the University will provide such books, apparatus, and material as may be requisite for this purpose.

The principal subjects in which advanced instruction is now provided are these:

Greek.
Latin.
Sanskrit and Comparative Philology.
Semitic Languages.
Anglo-Saxon and English.
German.
Romance Languages.
History.
Political Economy.
Comparative Jurisprudence.
History of Philosophy.
Mathematics.
Astronomy.
Physics, including Applied Electricity.
Chemistry.
Geology, Mineralogy, and Petrography.
Biology, including Physiology and Morphology.
Pathology.

Greek.

The graduate instruction in Greek is directed by Professor Gildersleeve, in connection with the Greek Seminary, which consists of the Director, Fellows, and Scholars, and such advanced students as have satisfied the director of their fitness for an active participation in the work by an essay, a critical exercise, or some similar test of attainments and capacity. All graduate students, however, may have the privilege of attending the Seminary exercises.

Each regular member is required to take his turn as interpreter, critic, analyst, and special fields of research are assigned according to progress or bent. It may be added that, while the Seminary demands a large portion of the student's time, the requirements are not so great as to preclude independent study in other directions, and care is taken so to direct the private reading that in the usual period of preparation for the higher degree a comprehensive knowledge of Greek literature and Greek life may be gained.

By these arrangements the students are brought into closer relations with the professor and encouraged to perform more independent work and engage in more extended experiments than would be possible on a system of mere recitation or the simple hearing of lectures.

The cycle which has been followed for some years is made up of the Greek Historians, the Attic Orators, Plato, Aristophanes. For example:

1892–93.	Attic Orators.	1894–95.	Aristophanes.
1893–94.	Plato.	1895–96.	Greek Historians.

The methods followed have been described in successive annual reports, which may readily be consulted.

The work in the Seminary during the current year was concentrated on Greek Historiography; for the next year the centre of work will be transferred to the Attic Orators.

In addition to the work of the Seminary (two meetings a week), courses of lectures are given by the Director and by other qualified persons. For example, during the year 1895–96, Professor Gildersleeve gave a course on the Greek Historians and a series of conferences on Hermeneutics and Criticism, the text-book being Blass, lectured once a week during the year on the Syntax of the Noun, and twice weekly during the first quarter directed a course of practical exercises in Greek Composition and extemporaneous translation from the Greek. Dr. C. W. E. Miller, Associate in Greek, held lectures and conducted exercises in Greek Palaeography, twice a week from January to the end of the session.

Undergraduate students who select the classical group of studies are required to follow the class-work in Greek, four hours weekly through two years, in addition to other studies. The texts read vary from year to year, including selections from poets, historians, and orators. Exercises in Greek composition and in reading at sight are likewise required. To extend the acquaintance of the student with Greek literature, he is obliged to read by himself certain prescribed authors, and to pass an examination upon them. The instruction of the undergraduates in Greek is conducted chiefly by Associate Professor Spieker.

The American Journal of Philology, edited by Professor Gildersleeve, has completed its sixteenth volume, and the seventeenth is now in progress.

Latin.

Instruction in Latin is given on a plan similar to that already mentioned as followed in the courses in Greek. The advanced work proceeds through the organization of a Seminary, of which Professor Warren is the Director. The instruction has two distinct ends in view. It aims first to give to students a wider and more accurate knowledge of the Latin language and literature than can be secured in the ordinary college course, so that they may become more efficient teachers; and, secondly, to train them in the methods of scientific research, so that they may become independent investigators. It is not believed, however, that these two ends can be kept separate. On the contrary, the most enthusiastic teacher is likely to be one who is thoroughly imbued with the scientific spirit. Accordingly, the most important instrument of training is the Latin Seminary, which meets twice a week during the year. Each year some author or a group of closely connected authors is made the centre of work. Critical methods are taught, interpretations are prepared by members of the Seminary in turn, and papers are read by them containing the results of special investigations on the syntax and style of authors and on other themes, literary and linguistic. The subjects treated during the last four years have been as follows:

1892–93. Plautus and Terence.
1893–94. Cicero's Orations and Letters.
1894–95. Roman Satire, especially Horace and Juvenal.
1895–96. The Roman Historians, especially Livy and Tacitus.

In the absence of Professor Warren, who will, during the year 1896–97, act as director of the American School of Classical Studies in Rome, the Seminary will be in charge of Associate Professor Smith. The centre of work will be Vergil.

Courses of lectures are also given from time to time by the Director of the Seminary. For example, in 1895–96, he lectured

on the Roman Historians once a week during the first half-year, and on historical Latin grammar once a week during the year. Throughout the year a Journal Club met bi-weekly to report and discuss recent philological publications in the field of Latin. A class meeting once a week in the last half-year interpreted the Monumentum Ancyranum and other historical inscriptions. Professor Smith gave a course of lectures on elegy and epigram and conducted a pro-seminary in Sallust, weekly during the year.

The undergraduate work in Latin varies somewhat according to the group of studies chosen. The works read differ year by year, but are so chosen that the student may become acquainted with historical, poetical, and philosophical authors. His work in the class-room must be supplemented by a prescribed course of reading which he follows privately and on which he undergoes an examination. Latin composition and sight-reading form a part of the course. Associate Professor Smith and Dr. H. L. Wilson assist in this work.

Sanskrit and Comparative Philology.

Courses of instruction, under the direction of Professor Bloomfield, are provided in the Indo-Iranian languages (Vedic, Sanskrit, Avestan, and Old Persian); in comparative grammar of the Indo-European languages; in historical ethnology; and in general linguistic science. This instruction aims to meet the wants of those who wish to devote themselves to the study of these branches exclusively and for their own sake, *i. e.*, those who wish to become specialists in Sanskrit philology, or comparative philology; and also the wants of students of languages in general who wish to obtain a broader linguistic basis for special studies in other departments of philology, or in history.

The advanced work aims especially to meet the wants of those who wish to make Indian philology or comparative philology their special study. Instruction is given by practical exercises, lectures, seminary work, and, where possible, the use of native Sanskrit manuscripts. The seminary is furnished with a carefully selected library, and approximately complete sets of the

Oriental journals, and the journals in comparative philology are freely accessible in the main library.

A prolonged course in Sanskrit, involving two lectures a week during two years and attendance in the Vedic Seminary for a half-year (one hour a week), is planned so as to furnish a good knowledge of classical Sanskrit, and to include an introduction into the dialect of the Vedas. This amount of work represents material sufficient for the first subsidiary subject for the degree of Doctor of Philosophy. A course in the same study for one and a half years, involving two hours a week, is the amount required for a second subsidiary subject leading to the same degree.

A synopsis of the courses offered during recent years may be presented under four heads:

I. Courses in the general principles of comparative philology or linguistic science, and on special chapters thereof; lectures on ethnology.

II. Courses in the general comparative grammar of the Indo-European languages; comparative grammar of Sanskrit and Zend; comparative study of Greek accent; comparative study of Greek, Latin, Sanskrit, and Teutonic, including vocalism, consonantism, noun-formation, and inflections.

III. The Vedic, Sanskrit, and Prākrit dialects: Rig-Veda; Atharva-Veda; literature of the Brāhmaṇas and Upanishads. The law-books of Manu and Yājñavalkya; Çakuntala and introduction into Prākrit; Hitopadeça, Kathāsaritsāgara, and Nala. Sanskrit grammar and prose-composition.

IV. The Avestan language and the literature of the Avesta.

During the session of 1895–96 the Vedic Seminary was engaged in the critical study of the Rig-Veda, to be followed the next academic year (1896–97) by the study of the Atharva-Veda. This will be rendered especially inviting owing to the recent notable activity in this field of investigation, which has resulted in an unusual number of publications, *e. g.*, the Indian edition of Sāyana's commentary, the late Professor Whitney's translation of the Atharva-Veda (now in press), and the Director's volume of Atharvan hymns, translated with ritual and commentary as a volume of the Sacred Books of the East.

A beginners' course in Avestan (grammar and readings) was carried on during the second half of the session.

A second, elementary course in Vedic Sanskrit was conducted during the second half-year by Mr. J. A. Ness. This course is preparatory to the Vedic Seminary.

In classical Sanskrit there were advanced readings in the Hitopadeça and Manu. The elementary work, two hours a week during the year, consisted of a course in grammar and the reading of easy texts.

In Comparative Philology the work was two-fold. First, a course in the general principles of linguistic science, together with an exposition and criticism of modern methods in scientific grammar. This was prefaced by an ethnological sketch of the principal divisions of the Indo-European family. Secondly, a course of lectures during the year on the vocalism of the Indo-European languages, with special reference to Greek, Latin, and Teutonic. This is to be followed the next session by a corresponding treatment of the Indo-European consonants.

Oriental Seminary.

In the Oriental Seminary, of which Professor Haupt is Director, both introductory and advanced instruction is provided in Oriental history and archæology, as well as in the principal Semitic languages, *viz*, Hebrew (both Biblical and Talmudic), Biblical Aramaic, Syriac, Arabic (both classical and modern), Ethiopic, etc., and in Assyriology in its various branches (Assyro-Babylonian and Sumero-Akkadian). In the organization adopted in 1883, a course of three years was arranged. The centre of work is the Old Testament, special attention being given to the critical study of Biblical texts and the cuneiform inscriptions bearing on the Scriptures. Professor Haupt is assisted by Dr. Christopher Johnston.

The various courses are adapted to the requirements of four classes of students, namely: (*a*) students of theology wishing to obtain a thorough acquaintance with the sacred tongue and its sister idioms as a means of elucidating Scripture and problems of the comparative history of religion; (*b*) students of linguistics intending to make comparative grammar of the Semitic languages

their specialty; (*c*) students of Oriental history and archæology desirous of drawing directly from the original sources; (*d*) persons looking for instruction in the living Oriental languages (as modern Arabic or Turkish) for practical purposes.

In these various courses, the seminary method is followed throughout, the student being from the first brought face to face with the several idioms, without long theoretical introductions. Stress is laid on a thorough grammatical training, imparted in connection with the minute philological analysis of some selected text in the respective languages, printed grammars serving only for occasional reference.

A room has been set apart containing a well-equipped working library for all the branches of Oriental research (including the library of the late Professor A. Dillmann, of Berlin), and some advanced students are usually present to help in the preparation for the recitations conducted by the Director of the Seminary, and to furnish any other aid that may be desired.

English.

The instruction in English is given by Dr. James W. Bright, Professor of English Philology, Dr. William Hand Browne, Professor of English Literature, and Dr. Herbert Eveleth Greene, Collegiate Professor of English. Graduate and collegiate courses are provided in conformity with the principles followed in the other language departments. Advanced students are instructed in the technical results of linguistic and literary science, and trained in the processes of original investigation. The college work is arranged upon a plan that prescribes for every student a systematic training in English Composition and in a critical study of standard prose. This is followed by an introductory course in English literature which is required of all students except those pursuing the studies of the Modern Language Group (Group VII); and a more advanced course is provided for those who may wish to continue the subject. The work of students in the Modern Language Group includes, first, a general survey of the history of English literature from the earliest times to the present day.

After this preliminary course, more definite and minute study is bestowed upon prolonged courses that centre in the most significant periods of that history: these are courses in Anglo-Saxon; in the language and literature of the Middle English Period, and especially Chaucer and his contemporaries; in the Early Scottish Poets; in the Elizabethan period; and in the chief writers of the eighteenth and nineteenth centuries.

Graduate Courses.

The advanced courses in English are so arranged as to enable a student, in three or four consecutive years, to study with precision all the important departments of Grammar and of Literature. Instruction is imparted by lectures, by freer conferences, by the methods of the Seminary, and by class-room recitation. The Seminary (four hours a week) constitutes the chief organ of instruction and research. It supplies means for the inculcation of what is presented in the lectures, and for organized and prolonged concentration of effort on selected subjects. Usually the work of the Seminary centres each half-year in a different period of the literature, ranging from Anglo-Saxon to the present century. The literature of the period studied is investigated as to its sources, the history of its forms and traditions, and its artistic value; and linguistically the period is studied in its relation to the history of the language. The members of the Seminary also meet as a Journal Club (fortnightly) chiefly for reviewing the current philological (linguistic and literary) periodicals, and recently published books and monographs. As supplementing the lectures and the Seminary, classes are organized for special training in textual criticism. There is also annually an advanced course in the History and Theory of Rhetoric (Professor Greene), and an additional course of lectures on some department of English literature (Professor Browne). Weekly conferences and informal lectures furnish an opportunity for the discussion of many topics not provided for in the regular courses of the year. This hour is also in part occupied by lectures given by the students, who may thus acquire experience in the more formal presentation of the results of special study.

College Courses.

1. *Rhetoric and English Composition.* In this course, which is required of all undergraduates, the principles of good writing are inculcated. The use of text-books is supplemented by lectures and discussions, by weekly practice in the writing of short papers, a few of which are read and criticised in the class-room, and by the writing of longer papers, which are read and criticised privately with the writers. During the first half-year the study is directed to the elements of style,—the word, the sentence, and the paragraph. The weekly practice in writing is combined with an examination of the usage of standard writers. During the second half-year the various forms of composition—description, narration, exposition, and argument—are studied and practiced; the work also includes a critical study of standard prose in its various forms.

2. *English Literature.* The course in Rhetoric is followed by a prescribed course in English literature; and an additional course, which is elective, is provided for those who may wish to continue the study. These courses are for undergraduate students in Groups I–VI,—those who are not making a special study of the subject, but who wish such acquaintance with it as may be regarded a necessary part of a liberal education. The aim of the instruction in these courses is to give the student an outline history of English Literature, to teach him to read intelligently and with insight, and to lead him to read widely in the works of the more important writers.

The Major and Minor Courses are followed by those undergraduates whose studies are directed more especially to modern languages and their literatures (Group VII).

3. In the English Minor a general course in English literature, from the earliest to recent times, is given, the text-book being Tyler's edition of Morley's *Manual.* In addition to the questions suggested by the text-book, the instructor supplements the work by oral instruction, the object being to make this course not a mere memorizing of names, works, and dates, but to give the class some living acquaintance with the more important authors, and to enable them to get some grasp of the literature as a continuous whole. The other part of this course consists of a study

of the writers of the Early and Middle English periods, Morris and Skeat's *Specimens* being used as a text-book. The changes which both the language and the literature underwent during this transitional and formative period are dwelt upon, showing by what stages and under what influences Modern English was developed.

The major course in English—a third year's course—is divided between linguistic and literary studies.

4. *Anglo-Saxon.* An elementary course in Anglo-Saxon prose and verse occupies two hours a week for one year. The text-book used is Bright's *Anglo-Saxon Reader.*

5. In the literary part, one hour a week is given to the Early Scottish Poets from Barbour to Lyndsay, whose work continues the great tradition of English literature during the otherwise somewhat dim period from Chaucer to Surrey. The texts are studied in a reader especially prepared for this class, and the necessary supplemental information, historical and other, is given by the instructor.

6. One hour a week is also given to the study of some important period of literature or group of writers sufficiently characteristic to be regarded as a whole. For the first half-year the Elizabethan writers have usually been taken, including the reading by the class of one play of Shakespeare. For the second half-year some other period or group is selected.

It will be seen that the undergraduate work in the Major and Minor courses comprises: the earliest English or Anglo-Saxon; the transitional literature from the Anglo-Saxon to Chaucer; the great period of Scottish literature between the times of Chaucer and Elizabeth, the great Elizabethans, and some important later period.

German.

This group of studies is under the direction of Professor Wood, assisted by Dr. B. J. Vos, Associate in German, Dr. A. B. Faust, and Dr. T. S. Baker.

Instruction is provided in German of all periods, and in the earlier development of the other members of the Teutonic family of languages.

In the German Seminary, in which the graduate instruction centres, nearly equal attention is devoted to German Literature and German Philology. To enter upon the work of the Seminary in literature, the student should possess a knowledge of German equivalent to that imparted in the undergraduate courses, hereinafter mentioned, supplemented by private readings. For the seminary work in philology, it is desirable, in addition, that preliminary courses in Gothic and Middle High German should be first completed, and these may be taken with advantage by the student immediately upon entering. All graduate students of German are required to share in both the philological and literary work, and to direct their efforts to the attainment of broad results, which may serve as the foundation of scientific work and of successful teaching; but the Seminary and the allied graduate courses are believed to offer also sufficient opportunity and encouragement for the prosecution of chosen lines of work, whether on the linguistic or literary side, in accordance with individual capacity and bent. In this way, opportunity for independent research is afforded, within the framework of organized effort directed towards the attainment of results which concern the Seminary as a whole, and towards which each member is expected to contribute his share.

The subjects selected for the Seminary during recent years have been as follows:

1891–92. Otfried's Evangelienbuch; Minnesangsfrühling.
1892–93. Walther von der Vogelweide; the Period of "Sturm und Drang."
1893–94. Parzival; Goethe's Faust.
1894–95. Minnesangsfrühling; German Literature in the Eighteenth Century.
1895–96. Goethe and Schiller (1786–1805); Walther von der Vogelweide.

The Germanic Society, which meets fortnightly, supplements the work of the German Seminary; before it are presented not only reports on articles in current journals, but also successive results of studies by the members. The chief object of the Society is to foster and guide the aptitude for more sustained individual investigation than the Seminary proper offers scope for. Lists of the papers presented and discussed are given in the yearly reports.

In addition to the work of the Seminary (three meetings a week), other advanced courses are given. For example, in 1895–96, Professor Wood lectured on the Swabian and Austrian Literature in the 19th Century, and gave courses in Gothic and Old Norse (The Edda). Dr. Vos conducted classes in Early New High German Prose and in Middle High German (Moriz von Craon).

The undergraduate courses in German are conducted chiefly by Dr. B. J. Vos, assisted by Dr. A. B. Faust and Dr. T. S. Baker. A course in elementary German is given for students of the preliminary year, who have entered with Greek. This is followed by the regular work in German during the first college year, a course required of all undergraduates. Nearly equal portions of the German Drama and of German literary prose are read. Private readings and weekly exercises in prose composition supplement the class readings.

Undergraduates in Group VII who elect German, or undergraduates in any of the seven groups who substitute German at this point in their course, pursue the study during a second year. The readings from the classical period are continued in texts of greater difficulty, and instruction is given in the history of German literature and in the writing of German prose.

A shorter Elective Course (twice weekly) is offered to undergraduates who have completed the work in German of the first college year. Students in the second or third year may also elect a course in Rapid Reading of Contemporary Literature.

Classes are provided in Historical and Scientific German Prose, for graduates who lack the ability to read German at sight. Classes in Oral Practice and in Conversational German are also provided for both graduates and undergraduates.

Romance Languages.

Advanced instruction in Romance languages is so planned as to cover at least three years and is directed by Dr. A. Marshall Elliott, Professor of Romance Languages, with the assistance of Dr. Menger, Dr. Rambeau, Dr. Marden, Dr. DeHaan, and others. The subjects of instruction are divided into three distinct sections:

a purely linguistic, a purely literary, and a composite group which is intended to unite the first two. Every one who intends to take a degree in Romance Languages must work in these three lines, which are so arranged as to supplement one another according to the attainments and bent of the student, and which are concentrated, for given periods of the course, on the same linguistic domain. The first year is chiefly spent in preparation for seminary work, to which the student is generally admitted, as an active member, at the beginning of the second year. During this preliminary period a practical knowledge of the principal Romance languages is acquired (a thorough acquaintance with Latin and Modern French being pre-supposed); a brief survey is given of the history of the science, together with an introduction to the use of scientific methods in language and literature. With this equipment the student is prepared to begin an appreciative scrutiny of special texts with their critical linguistic and literary apparatus. He is taught to handle his materials with discriminating judgment, and, according to his progress, subjects are assigned to him for investigation which tend to develop the patience and accuracy necessary to a careful investigator. In literature, as in language proper, it is particularly to the origins that his attention is directed, though constant reference is made, by way of comparison, to the modern forms. By extensive reading required in connection with the subjects taken up, he is made familiar with the different phases of opinion held by leading European scholars, and is thus enabled to control certain parts of his subject within well-defined limits. After the first year the student is expected to concentrate upon some single line of work within his general field. It will be observed that the student's work in this course is comparative, and that he moves from the general to the particular. In the early part of it, the object is to give a broad basis to work on, by making him so familiar with the principal Romance idioms that he may use them readily, by way of illustration, in his subsequent studies. Dialect study and phonology are made essential features of this plan of studies.

The subjects to which attention has been given in the Seminary during the last ten years are as follows:

1883–84. Anglo-Norman Dialect and the Oaths of Strasburg.
1884–85. Cantilène de Sainte Eulalie and Fragment de Valenciennes.
1885–86. The Franco-Norman Dialect, with the Vie de Saint Alexis.
1886–87. The Oaths of Strasburg and the Cantilène de Sainte Eulalie.
1887–88. Old French Paraphrase of the Canticum Canticorum and the Fragment de Valenciennes.
1888–89. The Oaths of Strasburg and the Cantilène de Sainte Eulalie.
1889–90. *Reimpredigt:* Grant mal fist Adam.
1890–91. L'Epopée royale: Pèlerinage de Charlemagne.
1891–96. Marie de France: Fables.

In addition to the work of the Seminary, lectures are regularly given at stated periods of the course: (1) on French phonetics, physiological and historical, (2) on Old-French syntax, (3) on Romance morphology, (4) on French dialects, (5) on Italian dialects, (6) on Old-French palæography, (7) on the history of French philology, (8) on the linguistic ethnography of France and Italy, (9) on the sources of Romance philology, (10) on Popular Latin, (11) on Italian philology and literature, (12) on Spanish philology and literature, (13) on Old-French literature, (14) on Modern-French literature, (15) on Romance versification.

The special lectures on French literature are arranged to run through the whole period of three years, and form an important part in the training of the student.

A special publication, Modern Language Notes, now in its eleventh volume, is issued monthly by members of the modern language departments, in which are presented the most recent literary and scientific aspects of linguistic research in the modern idioms.

The undergraduate classes in French are conducted by Associate Professor Rambeau and Dr. Marden. Students in Group VII who elect French follow class-work for four hours weekly through two years, during which time they read extensive selections from Modern and Middle-French texts, and are made acquainted with the general laws of French phonology and morphology. All undergraduates must complete the work of the first of these two years. Private reading is required, varying from year to year according to the authors taken up in class.

Courses in Italian and Spanish are also provided for undergraduates.

History and Politics.

The work of this department is under the direction of Professor Herbert B. Adams, aided by Professor G. H. Emmott, Dr. Vincent, Dr. Sherwood, Dr. Steiner, Dr. Hollander, and such special lecturers as may be engaged. Professor Woodrow Wilson, Dr. James Schouler, Dr. E. R. L. Gould, and Dr. W. W. Willoughby give various courses. As at present organized, the work of the department aims to accomplish three main results:

1. The preliminary training of students, both graduate and undergraduate, to such a knowledge of the essential facts and principles of general history and politics as will contribute towards a liberal education and serve to fit men to pursue advanced courses in special branches of these sciences, with a view to taking the doctor's degree or to entering the work of education, law, journalism, charity organization, or the civil service. This training process is pursued in undergraduate class courses, where systematic and positive instruction is given by means of required text-books, lectures, essays, oral reports, and constant drill. The undergraduate work extends, in its various sections, over a period of three years (see College Courses, Sixth Group, beyond). Graduates of other institutions who have not had the equivalent of these preliminary courses in History and Politics and in French and German, are expected to make up their deficiency by extra work in undergraduate classes.

2. Advanced instruction in history, economics, politics, social science, statistics, historical and comparative jurisprudence, historical criticism, methods of research, historiography, for graduates, or special students of mature years, if qualified by ability and previous studies to pursue such courses. Undergraduates pursuing a course for the bachelor's degree are not allowed to take graduate work. Advanced instruction is given chiefly by lectures, accompanied by private readings on the part of the students, and by frequent examinations, both oral and written, upon special subjects.

3. The development of a spirit of original research among the more advanced members. This end is attained chiefly in individual ways by the constant association and co-operation of

students and instructors, not only in advanced classes and in various fields of special work, but in organized societies called Seminaries of History and Economics, meeting fortnightly in the department library for the report and discussion of original studies. Political, social, and educational conferences are also held. For several years the scientific researches of graduate students have been more especially in fields of American institutional and economic history. There is now a growing tendency to extend inquiries into the broader domain of comparative politics and economics, social science, and education. The best results of original and organized inquiry by this department are published in the volumes of "Historical Studies." Under the direction of Professor Adams, the history of higher education in the United States is being written by students and collaborators representing individual States. The results are published by the U. S. Bureau of Education. The results of original economic investigation have hitherto appeared in the "Studies," in the Publications of the American Economic Association, and in leading economic journals.

The following general statement will suffice to characterize the various courses of instruction. Details may be found in the annual announcements.

(*a*). *History.*—Professor Adams gives to graduate students six courses of lectures (two courses each year) upon institutional history. He selects representative phases of ancient and modern civic society. One half of the first year is devoted to the early history of institutions and to Greek politics; the second half, to the history of Prussian politics and the nineteenth century. The first half of the second year is given to Roman constitutional history; the second half to French absolutism and the history of the French Revolution. In the third year particular attention is given to German peoples and their early migration and federations, during the first half; during the second half, to Anglo-American institutions. Each year's work is independent and complete in itself. Professor Adams also gives courses of undergraduate instruction in the history of civilization, Church history, the Italian Renaissance, and the history of international relations.

Dr. James Schouler, author of the History of the United States under the Constitution, gives in successive years three courses of twenty-five lectures each on (1) American political and economic history, (2) American constitutional law, and (3) principles of the common law.

Dr. John Martin Vincent lectures to graduates on (1) the social and economic history of Europe, (2) the Reformation and the Protestant Revolution, (3) the science of historical investigation and the general history of historical writing. He also conducts (4) a special conference of graduate students in the study of selected historical problems, and has charge of (5) undergraduate courses in European history.

Dr. Bernard C. Steiner conducts an undergraduate course in American political and constitutional history.

(*b*). *Historical Jurisprudence.*—Professor George H. Emmott gives a three years' course in historical and comparative jurisprudence, with the following subdivisions, each completed in one year: (1) history and principles of the Roman law; (2) comparative jurisprudence of the principal European systems; (3) history of the common and statute law of England. Professor Emmott lectures also upon the sources of English history and the historiography of England, besides conducting undergraduate classes in the political and constitutional history of England.

(*c*). *Comparative Politics.*—Professor Woodrow Wilson conducts a three years' graduate course in administration and comparative politics. The first series of lectures discusses the nature, scope, and method of theoretical politics and the general character of administrative law. The second course deals more particularly with central systems of administration, as illustrated in England, France, Prussia, Italy, and the United States. The third course is devoted to systems of local government.

Dr. Westel W. Willoughby gives annual courses of class lectures upon the following subjects: (1) Theory of the State; (2) The Federal State in Theory and Practice; and (3) History of Political Philosophy.

(*d*). *Economics and Social Science.*—It is planned to offer systematic instruction in the general theory and in the most important special fields of economic science. Effort is directed to promote

the mastery of sound methods of research. Considerable attention is given to the history of the science itself as one of the best means of studying the development of economic life and institutions.

Dr. Sidney Sherwood is in charge of the instruction in Economics. He is assisted by Dr. J. H. Hollander. Various well-known specialists lecture from time to time.

Graduate Work.

Dr. Sherwood conducts the following courses: (1) Economic Conference meeting one evening fortnightly for seminary work; (2) Class in Research and Criticism, meeting two hours weekly for co-operative work upon some special subject. The Physiocratic writings and their influence were investigated in 1895–96. Next year, early American economic literature and conditions will be studied; (3) six courses of lectures are planned to extend over a period of three years. In the first year (1895–96) the subjects were (*a*) credit and money, (*b*) corporations and trusts. Second year, (*a*) principles of economics, (*b*) banking. Third year, (*a*) French economists, (*b*) transportation.

Professor E. R. L. Gould lectures upon social economics and statistics, in various courses: (1) Existing social legislation in the principal countries of Europe, from the comparative point of view and with reference to underlying principles and present problems; (2) Statistics, embracing an analytical statement of the activities of individuals and of industrial and social organs, together with comparative standards of existence in their relation to economic competition; (3) Growth of social institutions, with particular attention to the family and its modern environment, together with the social problems of large cities.

Dr. J. H. Hollander lectures upon (1) science of finance, (2) history of economic theories, and (3) financial and industrial history of the United States. In 1895–96, his course was upon the history of economic theories since Adam Smith. In 1896–97 he will consider, during the first half of the year, the theory and practice of municipal finance; the second half, he will review the history of economic thought before Adam Smith. Dr. Hollander also conducts a class in the study of the economic development and characteristics of Baltimore.

Undergraduate Work.

Dr. Sherwood gives two hours, and Dr. Hollander, four hours of undergraduate instruction weekly. The following courses are arranged: (1) elements of economics, two hours weekly, required of all candidates for the B. A. degree; (2) historical and practical economics, two additional hours weekly, required of students in group VI; (3) advanced economics, two hours weekly, an elective course open to students of group VI who have taken courses (1) and (2).

Various other lecturers are heard, from time to time, upon economic, social, educational, and kindred subjects.

Library Facilities.

The department of History and Politics occupies at present several rooms on the floor immediately below the main library. In the main library are kept general works of reference, standard literature, ancient and modern, and some of the chief authorities in the general fields of history, philosophy, art, and science. Here also is a "New Book Department," in which are exhibited recent publications of scientific value in French, German, or English. The leading periodicals of various countries are to be found in the main library, which serves also as a general reading-room for the entire university. In the historical rooms below are grouped the special collections of books, pamphlets, and periodicals relating to history and politics. The nucleus of this library is the Bluntschli collection of books relating to law and politics, and many valuable manuscripts on Swiss customs and institutions. American and European history, political economy, international law, the science of government, administration, social science, and statistics are the principal fields from which materials have been gathered for seminary use. The advantages for the study of American history have been increased by the various gifts of Colonel Scharf and Mr. John W. McCoy. These collections are valuable for the study of Maryland and Southern history.

Altogether the historical collection numbers about 20,000 volumes. Lectures are given and seminary exercises are held amid an environment of books. Undergraduate classes have

their respective rooms, with an equipment of maps, diagrams, and works of reference for class use. Instructors have their private offices where, at certain hours, they may be consulted by their students. The department has its special librarian, Dr. J. M. Vincent, who gives such assistance as may be needed in the use of books and who lectures upon library administration, historical and literary methods. Students and instructors have easy access to the valuable collections of the Maryland Historical Society, the Mercantile and Law Libraries, the Whittingham Library (especially rich in Church History), the Pratt Public Library, and the Peabody Institute, which contains 125,000 volumes and is especially rich in the sources of European history.

Visits are occasionally made to Washington for the purpose of consulting the libraries of Congress, the State Department, Department of Labor, Bureau of Education, etc.

Philosophy.

A course in the History of Philosophy, for graduate students, is given by Professor Griffin, in which Bacon's Novum Organum (Book I), Descartes's Method, Meditations, and Principles of Philosophy, Spinoza's Ethics, Leibnitz's Monadology, Locke's Essay on Human Understanding (Books I, II, IV), Berkeley's Principles of Human Knowledge, Hume's Treatise on Human Nature (Book I), Kant's Critique of Pure Reason and Critique of Practical Reason (in Watson's "Selections") are read and discussed.

The instruction in Philosophy offered at present is, however, mainly undergraduate, consisting of required courses in Logic, Psychology, and Ethics, which occupy five hours per week throughout the year.

(*a*) *Logic.* Attention is given to the general theories of deduction and induction; to the forms of thought—notion, judgment, and reasoning; and to the methods of scientific investigation and proof, as well as to the application of the rules of the syllogism, and the detection of the various kinds of fallacies.

The text-books used are Jevons's Elementary Lessons in Logic and Fowler's Elements of Inductive Logic, and references are given to the larger works of Jevons and to the works of Mill, Bain, Venn, Keynes, and other recent writers. The work consists of frequent recitations and of short informal lectures, and numerous written exercises are given out from time to time in the opposition and conversion of propositions, in the application of the rules of the syllogism, in the detection of fallacies, and in the elimination of contradictions from thought.

(*b*) *Psychology.* The instruction in Psychology is intended to give a general view of the results of the new methods of study, the recent investigations in regard to the quality and intensity of sensations, the duration of psychic acts, etc.—in general, the subjects treated in the second part of Ladd's Physiological Psychology—being presented with sufficient detail to render them intelligible and interesting. A series of lectures and demonstrations on the anatomy and physiology of the nervous system—given in 1895–96 by Dr. L. F. Barker—is included in the course.

Especial emphasis is laid upon the facts of conscious experience as known through introspection, the most important end to be secured being, as it is believed, such an understanding of the facts and laws of mental life as shall fit one for wise self-government and effective influence. With this view, such powers and states of mind as attention, memory, association, habit, imagination, the feelings, the will, are discussed in as concrete and practical a way as possible. Baldwin's Elements of Psychology and Ladd's Outlines of Physiological Psychology are used as the basis of instruction, but these are largely supplemented by informal lectures and by references to various authorities. An essay on an assigned subject is required from each member of the class.

(*c*) *Ethics.* The fundamental problems of Ethics and the application of moral principles to the guidance of conduct and the formation of a manly character are considered, with special reference to the Christian theory of morals. The great historic systems—hedonism, utilitarianism, intuitionism—and the relation to ethical theory of the doctrine of evolution are discussed with the purpose of enabling the student to reach a just and intelligent view of the grounds and nature of moral obligation. But, while keeping to a scientific basis, the aim throughout is to

make the instruction of a directly practical nature, and to show the bearing of the problems considered upon questions of practical ethics.

Among the topics treated are the following:

Analysis of the fundamental notions—good and bad, right and wrong, conscience, duty, rights, liberty and moral responsibility, merit and demerit, etc.; the interpretation of these notions according to the several schools of ethical theory; the exposition and criticism of utilitarianism, intuitionism, and the ethics of evolution; the distinction between theoretical and practical morality; division of duties according to the various relations of man; duties to self; the general principles of social morality; duties of justice and of benevolence; duties to the family and to the State; the general principles of religious morality; connection between morality and religion; points of difference between Christian and Greek ethics; the moral ideal as modified by Christianity.

The subject is taught by lectures, recitations from a text-book—Fowler's Principles of Morals, Part II, being used at present,—and references to the works of the most important writers. One essay is required from each member of the class.

An outline of the History of Philosophy is given as a voluntary course.

There are also courses in other departments, which supplement the work here given. Those especially recommended are the following: Professor Gildersleeve's seminary work in Plato and the literary form of Greek philosophy; the course in animal physiology; Professor Emmott's courses on the history and principles of the Roman law, on the history and principles of English law, and on comparative jurisprudence, which are all closely related to the work in ethics; and the classes in political economy.

Mathematics.

The requirements of the government service having obliged Professor Newcomb to terminate his active duties in the University on the first of January, 1894, the instruction in higher mathematics is carried on by Professor Craig, Dr. Chessin, and Dr. Hulburt, and that in astronomy by Dr. Poor and Dr. Chessin, —with such co-operation as may be secured, from time to time, from Professor Newcomb and other persons.

The more advanced courses in mathematics vary from year to year, and are so arranged that a student who remains here two or three years may receive continued and systematic guidance in any of several directions. The courses in pure mathematics are given by Professor Craig, Dr. Chessin, and Dr. Hulburt, with such assistants in the undergraduate work as may be needed from year to year. Subjects in mathematical physics are treated by Professor Rowland and Dr. Ames. The less advanced subjects in mathematics are nearly the same every year; those more advanced generally alternate from year to year.

Students properly qualified have open to them most or all of the following courses in any two consecutive years:

Arithmetic, Algebra, and Geometry:

Theory of Higher Plane Curves,
Theory of Surfaces and Twisted Curves,
Modern Algebra,
Theory of Substitutions,
Theory of Numbers,
Quaternions,
Theory of Probability.

Analysis:

Theory of Functions of one and more complex variables and Functions of real variables,
Linear Differential Equations,
Algebraic Differential Equations,
Partial Differential Equations,
Algebraic Integrals of one and two variables,
Elliptic Functions,
Abelian Functions.

Astronomy:

Spherical Astronomy,
Practical Astronomy, with the use of instruments,
Theoretical Astronomy, including Computation of Orbits,
History of Astronomy,
Perturbations.

Applied Mathematics and Mathematical Physics:

Hydrodynamics,
Theory of Elasticity,
Theoretical Dynamics,
Problems in Mechanics,
Theory of Attractions,
Physical Optics,
Thermodynamics and Heat Conduction,
Electricity and Magnetism,
Theory of Sound.

Undergraduates are annually instructed in

Elementary Analytic Geometry,
Theory of Equations,
Modern Plane Analytic Geometry,
Differential and Integral Calculus,
Differential Equations,
Solid Analytic Geometry.

Seminary work is carried on by Professor Craig. Short courses of lectures on special subjects other than those mentioned above are given from time to time during the year by Professor Craig and by others who may be invited to do so.

The leading mathematical journals are regularly received, besides the publications of learned societies abroad and at home. Sets of the Comptes Rendus, Philosophical Magazine, Crelle's Journal, Mathematische Annalen, Acta Mathematica, Annali di Matematica, Grunert's Archiv, Poggendorff's Annalen, etc., are accessible.

The University has a collection of about two hundred and thirty geometrical models, illustrating the forms of mathematical solids, surfaces, and curves, their singularities and varieties, and the methods of descriptive geometry by which they are represented on a plane.

The American Journal of Mathematics, founded by Professor Sylvester, and edited in recent years by Professor Craig with the coöperation of Professor Newcomb, has completed its seventeenth volume. Volume XVIII is in progress.

Astronomy.

The work of this department is conducted on plans outlined by Professor Simon Newcomb, who acts as general adviser. The instruction is given under the immediate direction of Dr. Charles Lane Poor, who conducts the work in Theoretical and in Practical Astronomy. Dr. A. S. Chessin conducts the work in Celestial Mechanics.

The courses at present offered in Astronomy are designed for both graduate and undergraduate students, and they are so arranged as to meet the wants of all classes of students, from those

just beginning the study to those already prepared to carry on advanced work. They include a study of the various branches of the science, illustrated and enforced by practical exercises, and by original work so far as the time at the disposal of the student will permit.

For training students in the use of instruments the university has erected, in connection with the Physical Laboratory, a small working observatory and supplied it with the following instruments:

An equatorial telescope of 9½ inches aperture, with clock-work and filar micrometer.
A meridian circle of 3 inches aperture, with circles 2 feet in diameter reading to seconds.
A small meridian transit instrument.
A sidereal clock, chronographs, etc.
A reflecting circle by Pistor and Martins.
Several other small instruments, including an astronomical theodolite.

All students are required to make and reduce observations and to keep full records of the same; in fact, so far as possible, to do the routine work that would be required in a working observatory.

The principal books and journals relating to Astronomy are arranged in a special library. They include the star catalogues, ephemerides, and tables for use in the observatory, a complete set of the Astronomische Nachrichten, the Astronomical Journal, Monthly Notices of the Royal Astronomical Society, Annales de l'Observatoire de Paris (Mémoires), and the various publications of observatories at home and abroad.

The following is a general view of the courses offered:

Graduate Work.

For those students who wish to take Astronomy as a subordinate subject, a general outline course is given each year. This course is intended to familiarize the student with the most important problems of spherical and practical astronomy, with the principles and general methods of gravitational astronomy, and with the history and literature of the subject. There is also given every year a more advanced course for those students who have already had some preliminary training. Among the subjects treated of in this course are the theories of precession and

nutation, the computation and the correction of orbits, and the methods of computing special perturbations.

The advanced courses vary from year to year. Such courses embrace the method of least squares, the theory of measuring instruments, celestial mechanics generally, including the development of functions in trigonometric series, and the various methods of treating and integrating the equations of planetary motion.

Seminary work is carried on by Dr. Poor. Papers on assigned subjects are read by the students and are then discussed. Abstracts of the important papers in the current astronomical journals are also read and discussed.

Undergraduate Work.

A course in general astronomy is offered as an elective for third-year students. The course embraces an historical sketch of the development of the science and an outline of the present state of our knowledge of the constitution and motions of the celestial bodies. The use of the principal instruments is explained, and some practice is had with the equatorial.

Physics.

The instruction in Physics is under the charge of Professor Rowland, Director of the Laboratory, with the aid of Dr. J. S. Ames, Associate Professor of Physics and Sub-Director of the Laboratory, Dr. Louis Duncan, Associate Professor of Electricity, Mr. H. S. Hering, Mr. H. G. Geer, Dr. W. J. A. Bliss, and several assistants.

The laboratory is a substantial brick building 117 feet long by 71 feet wide, with five stories besides a basement and a sub-basement, and is so situated as to receive light from all four sides. Power and heat are furnished from separate buildings. The sub-basement is divided into constant-temperature vaults, in which are kept the dividing-engines used in ruling gratings for optical purposes, and the comparators designed for accurately measuring lengths. In the front part of the basement are the instrument- and machine-shops, and the dynamo-room. In the rear are four

rooms designed for special investigations in electricity and magnetism and the battery-room, which contains fifty storage-cells with a suitable switch-board and connections with all the working-rooms in the building. The main lecture-room with seats for 100 persons is on the first floor and is two stories in height. It is well lighted by windows on two sides, which can, however, be darkened if lantern-demonstrations are given; and the lecture-table is provided with gas, water, electricity and power connections. On the same floor as the lecture-room are two rooms for heat experiments and four for work in electricity and magnetism. On the second floor are the director's study and library; the physical, mathematical, and astronomical Seminary and Journal-meeting room; four lecture-rooms; and two rooms for the storage of lecture-apparatus. On the third floor are the elementary laboratories and the studies of various instructors. The fourth floor is specially arranged for investigations in light. There are spectrometer- and photographing-rooms, a balcony for heliostats, and other ample facilities for work in spectroscopy. On the fifth floor are rooms designed for special researches in light, and two large lofts. On the roof is a platform for open-air experiments; and the corner-tower is surmounted by the dome of the astronomical observatory. A transit-house in the yard furnishes exact time.

A temporary power-house has been erected to facilitate the work in electrical engineering. It is a one-story building, 25 by 65 feet, located opposite the physical laboratory, on Garden street, and contains a 900-light Westinghouse alternating current dynamo with its complete equipment, a 500-light Fort Wayne continuous current dynamo, a two-phase plant for the transmission of power, other smaller dynamos and motors, a 50 horse-power Ball & Wood engine, and a 60 horse-power vertical boiler to drive these machines. The electric current from any of the machines can be conveyed to the physical laboratory to furnish light and power, or to be used for experimental purposes. A large number of other dynamos and motors are in the basement of the laboratory.

The physical apparatus includes an equipment for lectures and demonstrations and a valuable collection of instruments for elementary work and research. Many of these have been made from special designs, others are standard instruments which have been purchased from European and American makers; all of them

have been most carefully selected. Special facilities, in some cases almost unique, are afforded those wishing to carry on investigations in electricity and in light.

The physical library of the university, as well as the mathematical, are now placed in McCoy Hall, where they are easily accessible at any time. The physical section contains complete sets of almost all the physical journals published in this country and abroad, and all the standard books of the present and the past. About sixty periodicals, English, French, German, and Italian, are received. Certain magazines and books of reference are, however, retained in the Seminary Room of the laboratory, where the advanced students can consult them at any moment. This small collection is specially selected each year with reference to the courses of advanced instruction offered that year. Among the magazines always kept on file in the laboratory are the following:

Philosophical Magazine, Physical Review, The Astrophysical Journal, Wiedemann's Annalen and Beiblätter, Zeitschrift für Physikalische Chemie, Journal de Physique, Comptes Rendus, Proceedings and Transactions of the Royal Society of London, and the Proceedings of the London Physical Society.

Instruction and facilities for work in the laboratory are offered all classes of students, elementary and advanced. The following is a general view of the courses:

First Year (Minor) Course.—This is intended for students who are beginning Physics or who have not a sufficient knowledge of the principles of the subject to warrant their taking up more advanced work. To enter this course a student must be able to use logarithms and must have studied plane trigonometry, at least as far as through the solution of right-angled triangles. The lectures are accompanied by demonstrations; and mechanics, heat, electricity and magnetism, sound, and light, are taken up in succession. Recitations on the subjects treated in the lectures are held regularly, and the course continues, four hours weekly, through the year. Along with the lectures the student does regular work in the laboratory, three hours a week, performing simple quantitative experiments, which illustrate the facts and principles considered in the class-room. Written records of lectures and reports of laboratory exercises are required.

Second Year (Major) Course.—This is designed to meet the needs of students who have already taken either the first year's course, or its equivalent, and who wish to pursue further their physical studies. A working knowledge of analytic geometry and calculus is required for admission to this course. The lectures take up the mathematical side of physics largely, and are on the following subjects:

Mechanics, extending to some of the simpler problems in the dynamics of rigid and elastic bodies.
Elementary Thermodynamics.
Mathematical Theory of Electricity and Magnetism.
Geometrical and Physical Optics, with special reference to diffraction phenomena.

Recitations are held regularly, and the course continues, four hours weekly, through the year. The laboratory work of this year occupies at least five hours a week, and includes problems that present greater difficulties, experimental or theoretical, than those of the first year. The student is allowed the choice of work in mechanics and electricity, or in heat and light. Written records and reports are also required in this course.

Advanced Work.—For the instruction of those students who have the necessary preparation, certain lectures are given in Mathematical Physics. There is one course, continuing through two years, which includes thermodynamics, heat conduction, physical optics, electricity and magnetism. As a preparation for this course, students are advised to take a preliminary course for one year, which treats briefly one or two subjects such as hydrodynamics, theory of elasticity, sound, mechanics, or theory of attractions. These lectures develop fully the mathematical theory of the subjects; and to follow them the student should have a satisfactory knowledge of differential equations and analytic geometry of three dimensions. Authors like Lord Kelvin, Stokes, Maxwell, Helmholtz, Poincaré are continually referred to, and the ability to read French and German is absolutely necessary.

The advanced students meet with the instructors once a week for the discussion of the current physical journals. Carefully prepared reports on various articles are here presented.

The Physical Seminary, to which only the most advanced students are admitted, meets one morning each week. The work of the seminary consists of two distinct exercises. One is the reading of some physical treatise and a consideration of the problems suggested by it; the other is the presentation of critical papers upon various assigned topics which are of special or historical importance.

The peculiar facilities for original research which are here afforded have caused special attention to be paid to advanced work, for the training both of investigators and of teachers; and all advanced students are expected to give as much of their time as possible to laboratory work. It is to this side of the subject that the Director gives his most immediate and careful attention; and not only are students able to watch important investigations as they are carried on, but, after a certain preliminary training, they themselves may aid in such work, or, under the guidance of the instructors, may undertake investigations which are designed to be of permanent value. As a preparation for this advanced work several months are spent by the students performing experiments which familiarize them with the more important instruments used in research, with the precautions necessary to obtain the utmost accuracy in using instruments of precision, and with general experimental methods.

An effort is made to render the laboratory as useful as possible to advanced students and investigators. Those who are prepared for such work will have the facilities which it affords placed most freely at their disposal, and will receive all the assistance that the instructors can give.

Applied Electricity.

The work in Applied Electricity is intended to give the students such a knowledge of the subject as will fit them to understand and appreciate the latest discoveries in electrical science, and to apply these to the practical electrical problems of the day.

The course includes lectures, extending through two years, on theoretical and applied electricity, steam and hydraulic engineering, central station equipment, machine design, mechanics of engineering, and practice in mechanical drawing. An important feature is laboratory work, to which much attention is paid, and

original investigation is especially encouraged. The course is primarily intended for college graduates.

Students who have received the degree of Bachelor of Arts on completing the mathematical-physical group in this University are admitted without examination. Graduates of other colleges are not examined for admission, but they must satisfy the instructors that they are prepared to take the course.

Candidates for admission must have completed the major and minor courses of this University (or their equivalents elsewhere) in physics and mathematics, the minor course in chemistry, and the course in freehand and instrumental drawing; and must be able to read either French or German. Those who have not had all this preparatory training must follow the courses in which they are deficient; only one of these may be taken simultaneously with the regular work of the course.

Persons, not college graduates, who wish to complete their preparation for the work in Applied Electricity, may be admitted to the requisite undergraduate courses, on passing an entrance examination covering the matriculation requirements in the following subjects: mathematics, French or German (first division), English, United States history, and the elements of one of the following branches of science—chemistry, botany, or physical geography. They will then follow for two years the preparatory courses in mathematics, physics, chemistry, and drawing, above indicated.

A certificate of proficiency is given to those students who complete the prescribed course in a satisfactory manner, and who possess a knowledge of *both* French and German.

Electricity.—The instruction includes lectures on theoretical and applied electricity, with constant laboratory work. The lectures aim to give a clear working-knowledge of the science, while in the laboratory the student receives what help and instruction he may need; yet, at the same time, he is taught to depend upon and think for himself, and is given every encouragement to undertake original work.

First Year.—Lectures and examples on the physical and mathematical theory of electricity.

SECOND YEAR.—Theory and design of dynamos and motors, transmission of energy, electric traction, telephones, telegraphs, alternating current apparatus, etc.

Electrical Measurements.—Accompanying the laboratory work during the first year, a course of lectures is given upon general methods of performing experiments and conducting tests, in which the fundamental measurements in electricity and magnetism and tests of generators and motors are considered.

Electrical Seminary.—Weekly meetings are held, at which students present carefully-prepared papers upon special topics in connection with their studies or their laboratory work.

Steam and Hydraulic Engineering.—Steam boilers, steam engines, and turbines are considered, with especial reference to the requirements of central station work and in accordance with the best modern practice. Steam engine and boiler trials and tests of large stations, as well as the design of central stations for light or power, form important features of the course.

Machine Design.—The properties and strength of materials are considered in their relation to the forms and proportions of the structural details of prime movers and transmission machinery.

Mechanics of Engineering.—The statics of structures is treated by analytical and graphical methods, combined with the statics, dynamics, and kinematics of machinery, the mechanism of prime movers, and power transmission.

Mechanical Drawing.—Preparatory work in geometric constructions and descriptive geometry is followed by a course in technical drawing especially planned to meet the requirements of electrical engineering work. It consists during the first year of a preparatory course in precise drawing and in making finished drawings from machine sketches. This is followed by a course in practical machine design and the preparation of working-drawings, tracings, and blue prints. The object in view is to familiarize the student with the conventional technicalities and enable him to obtain accuracy and facility in drawing and lettering.

During the second year the work embraces assembly drawings of machinery, boilers, dynamos, central stations, etc., prepared largely from the original designs of the students. This work is described in detail under the head of "Drawing."

Laboratory Work.—The students are expected to spend all of their available time in laboratory work, and the minimum time allowed is nine hours per week.

During the first year, exercises are given in fundamental experiments; the measurement of electromotive force, current, resistance, self and mutual induction, capacity, permeability, comparison of resistance, testing cables, batteries, dynamos, motors, incandescent and arc lamps, etc. The work is largely individual, and the character and grade of the work given to the student is determined by his qualifications.

During the second year more advanced work is done; the students are given original problems to work out in the laboratory, and research work is engaged in. Tests and critical examinations of engines, boilers, and other prime movers and their accessories; experiments and investigations in direct and alternating current lighting- and power-plants are important features of this year's work.

Geology.

The instruction in Geology is under the direction of Professor Clark, assisted by Dr. Reid, Associate Professor of Geological Physics, Dr. Mathews, Associate in Mineralogy and Petrography, and Dr. Bagg, Assistant in Geology. Important courses of lectures are given by Mr. G. K. Gilbert, of the U. S. Geological Survey, Lecturer upon Physiographic Geology, and by Mr. Bailey Willis, also of the U. S. Geological Survey, Lecturer upon Stratigraphic and Structural Geology.

The George Huntington Williams Memorial Lectureship upon the Principles of Geology will be inaugurated during the session of 1896–97 by Sir Archibald Geikie, Director-General of the Geological Survey of Great Britain and Ireland.

The courses in geology, which are offered to both graduate and undergraduate students, consist of lectures, laboratory and field

work, and conferences upon topics of current literature. Great importance is attached to laboratory training as a part of the geological course, and facilities are given for daily work from 9 a. m. to 5 p. m.

Commodious rooms have been recently fitted up in Hopkins Hall for the uses of the geological department, and there are placed the books, apparatus, and collections pertaining to geology.

Lecture Courses.—I. General Geology.—This course is planned to serve for the present as one of the regular undergraduate subjects, and at the same time to be introductory to all work in geology for graduate students, irrespective of the particular department in which they may choose their principal subject. The lectures embrace a general survey of the whole field of geology and are illustrated by rocks and fossils, by maps and sections, and by lantern views. Excursions are made on Saturdays, during the autumn and spring months, into the surrounding country. During the winter months an afternoon weekly is devoted, in the laboratory, to the exposition of specimens of rocks, fossils, and minerals.

II. Paleontology.—Attention is devoted to both the biological and geological relations of the important types of the animal and plant kingdoms. The phylogenetic history of the leading groups is traced out in detail, whenever suitable evidence exists. Laboratory work is arranged to accompany the course, care being taken to select typical material.

III. Historical Geology.—In this course the classification and distribution of the post-Archæan sedimentary rocks is considered. The use of fossils in the determination of horizons is fully explained, and a detailed study made of the maps and literature of the different countries of the globe.

IV. Geological Physics.—In this course the geological phenomena which depend directly upon physical principles are treated theoretically and experimentally. The problems relating to the temperature, the rigidity, the age, and the magnetic condition of the earth, as well as those relating to volcanoes, earthquakes, geysers, etc., are discussed.

V. Mineralogy.—This course consists of lectures upon crystallography, upon optical and general physical mineralogy, and

upon the description of mineral species. Facilities are offered to those who wish to undertake crystal-measuring, as well as the practical determination of minerals.

VI. Petrography.—This course consists of the discussion of petrographical methods, of rock structures, and of physical properties of rock masses, followed by the special petrography of the igneous rocks, including the study of the various classifications, the macroscopical and microscopical features of rocks, together with a discussion of their origin, distribution, and literature.

VII. Physiographic Geology.—This course of lectures is given by Mr. Gilbert and is fully illustrated by maps, models, and lantern views. The subject of the course is the origin of the forms of the earth's surface, and its treatment includes the systematic presentation of a large body of the principles of dynamic geology, especially those which apply to the sculpture of the land by the various processes of erosion.

VIII. Stratigraphic and Structural Geology.—This course is given by Mr. Willis and is a sequel to that of Mr. Gilbert. It consists of a description of the processes which result in the formation and upheaval of sedimentary rocks. Erosion is discussed with special reference to conditions governing the character of detrital materials. Sedimentation is considered as a complex process of sorting, distribution, and deposition of the waste of land areas, and deformation is treated as the process which initiates erosion, and also, as applied to folding, as the indirect result of excessive deposition. The mechanics of rock folding and thrusting is illustrated both by actual sections of the Appalachians and by experimental results. The whole course leads to a discussion of the principles which should govern interpretation of the sedimentary record.

IX. Principles of Geology. (The George Huntington Williams Memorial Lectureship). This course will be given by Sir Archibald Geikie in the autumn of 1896.

Laboratory Work.—Laboratory courses are arranged to accompany the lectures, while advanced or special students are given the opportunity to carry on fuller investigations upon either described or new materials.

The introductory laboratory work consists of an examination of materials designed to illustrate Course I, and includes typical fossils and minerals, together with maps, models, and sections of fully described areas.

Specially selected materials are also employed to illustrate the more advanced courses. Extensive collections for both the organic and inorganic work are owned by the university and include both determined and undetermined specimens.

For those who plan to carry on original investigations large series of undescribed materials will be found accessible, while the immediate region affords exceptional opportunities for further collecting. Several such special pieces of work relating to the local area have been already published, while others are at the present time under consideration in the laboratory.

Field Work.—The area of the State of Maryland includes, notwithstanding its comparatively small size, a remarkably perfect sequence of all the geological formations. The most ancient rocks which make up the earth's crust, as well as those still in the process of deposition, are here found, while between these wide limits there is hardly an important geological epoch which is not represented. As a result, most excellent facilities are afforded for a study of the various geological horizons. During the autumn and spring, excursions are made upon Saturdays into the surrounding country, the crystalline areas and the various Cretaceous and Tertiary formations being readily accessible. More extensive excursions are made from time to time into the early Mesozoic and Palæozoic areas of the western portion of the State and into the highly fossiliferous Tertiary region of the lower Chesapeake Bay.

After the student has become familiar with the various regions under the guidance of the instructors, he is encouraged to take up the study of some specified area, where, according to his inclination, he may carry on investigations upon the older crystalline rocks or the later fossiliferous strata. Several theses of this nature have been already prepared for presentation for the degree of Doctor of Philosophy.

Conferences and Student Lectures.—In order that the advanced students may be kept in touch with the most recent investigations

in the science, conferences are held, at which the leading journals in geology are reviewed by the students under the direction of the instructors. The conferences take place bi-weekly. The leading articles are given with some fulness, outline maps and sections being prepared in a manner suitable to illustrate the abstracts of the papers presented. At these conferences considerable attention is given to the foreign journals, particularly those in German and French.

In order that the advanced students may have the experience necessary for the successful preparation and delivery of class-room lectures, a course upon some phase of geology is arranged for, a special topic being assigned to each student. The lectures of this course take place bi-weekly, alternating with the conferences.

Geological Laboratory.—The Geological Laboratory is situated in Hopkins Hall, and comprises about twenty rooms, large and small, upon the second and third floors, where the student may carry on his work from 9 a. m. to 5 p. m.

The main room upon the third floor, now called the Williams Room, contains the collections and library of the late Professor George Huntington Williams. A smaller room upon the same floor contains the books and collections of the late Professor H. Carvill Lewis, and is known as the Lewis Room.

In accordance with the custom of the University, the books relating to the work of a particular department are given into its charge, the books for general reference being retained in the University library. The library of this department contains a good representation of the leading journals and works of reference upon geological subjects. It is greatly enriched by the Williams and Lewis libraries. Extensive series of topographical and geological maps likewise form a portion of the library, and these are constantly increasing in number.

Collections and Apparatus.—The collections of the department consist primarily of a large amount of important material brought together from Maryland and adjacent States by the late Professor Williams and those associated with him. It represents all the horizons of this State, being especially rich in crystalline rocks

and in Cretaceous and Tertiary fossils. Some of this material has been already described, while much awaits further study.

In the Williams Room are placed the collections of Professor Williams, consisting of extensive suites of specimens and thin sections of minerals and rocks selected from the best known and most thoroughly studied localities in both Europe and America.

Other important collections are the following:

The Lewis Collection of rocks and thin sections, numbering over 1000 specimens, deposited with the University by Mrs. Lewis. These specimens were collected by the late Professor H. Carvill Lewis and represent carefully selected material, especially from Pennsylvania, Germany, Switzerland, and South Africa.

The Krantz Collection of fossils contains several thousand specimens from the best known localities in Europe, being representative of all the different horizons.

The Hill Collection contains a large number of specimens of rocks and characteristic fossils, from the Cretaceous formations of Texas, collected by Professor R. T. Hill, of the U. S. Geological Survey. Most of Professor Hill's types are in the collection.

The Stürtz Collection, a suite of over 400 hand specimens and accompanying thin sections. These represent the rocks cited by Professor Rosenbusch in his *Mikroskopische Physiographie* and are from the type localities.

The Lehmann Collection, a suite of specimens and thin sections gathered by Professor J. Lehmann and sent by him to the University to illustrate his well-known work on the Crystalline Schists.

The Allen Collection of Minerals, which is especially rich in early discoveries from American localities, includes many of the type specimens illustrating the works of the late Professor O. D. Allen.

There are also the private collections made by Professor Clark in Europe, and numerous smaller collections obtained by gift or exchange, representing the geology of many portions of the globe.

The apparatus includes a series of beautiful models of the continents, placed in the custody of the University by E. H. Butler and Co., Publishers, of Philadelphia; a large model of Baltimore and vicinity, on the scale of 4 inches to a mile, without vertical exaggeration; the Shaler and Davis models, together with a large number of photographs and lantern slides. There are also several

goniometers, a dissolving stereopticon, over a dozen microscopes of late design, an electrical machine for preparing rock-sections, a complete suite of wooden and glass crystal models, together with other important pieces of apparatus for special work.

State Organizations.—The headquarters of the Maryland Geological Survey and Maryland State Weather Service are at the University, Professor Clark being both State Geologist and Director of the Weather Service. Special facilities are afforded advanced students, on this account, to carry on work in connection with these bureaus during vacation time.

Geological Publications Relating to the Baltimore Region.—The following publications relating to the local environment can be obtained from the Johns Hopkins Press:

Topographical Map of Baltimore and vicinity, price $1.00.

Geological Map of Baltimore and vicinity, price $1.00.

Geology and Physical Features of Maryland, price $1.00.

Climatology and Physical Features of Maryland (including Geology), being the First Biennial Report of the Maryland State Weather Service, free.

Many smaller contributions upon the geology of the Baltimore area have appeared in the Johns Hopkins University Circulars.

Other important papers have been published by the U. S. Geological Survey and in the various scientific journals.

Chemistry.

The instruction in Chemistry is under the charge of Professor Remsen, Director of the Laboratory, with the coöperation of Professor Morse, Sub-Director, Professor Renouf, First Assistant, Dr. Randall, Second Assistant, Dr. Gilpin, Dr. Jones, and other aids.

The Chemical Laboratory is well equipped. The original building, erected in 1876–77, was much enlarged in 1883, and again in 1890 extensive changes were made in it, so that now it can accommodate about two hundred students. A large lecture-room

has also been provided in an adjoining building. In McCoy Hall there is a room for fine weighing, to be used in work on atomic weights. There is an excellent library in the laboratory building open during the working hours. It contains full sets of all the important chemical journals, as well as the principal text-books and other publications relating to chemistry.

It is believed that the instruction is adapted to all grades of students, from the beginner to the candidate for the degree of Doctor of Philosophy. The higher or graduate work is based upon that given in the two years' undergraduate course, and those graduates of other colleges who have not followed courses equivalent to this, begin with that part of the undergraduate work which appears best suited to their needs. The following outline of the work will give some idea of its character.

Undergraduate work: First year.—From five to six hours each week through the year are given to laboratory practice. Three lectures are given each week by Professor Remsen or Professor Renouf, and one review on the subjects treated in the lectures and on the laboratory work is conducted by Professor Renouf, Dr. Randall, and Dr. Gilpin. The ground covered by this course is approximately that laid down in "An Introduction to the Study of Chemistry" by Ira Remsen (Holt, New York), which is the text-book used.

Undergraduate work: Second year.—In this year the same amount of time is given to the laboratory as in the first year. The object in view is to give a more complete knowledge of the phenomena of chemistry than is given in the first year. The making of preparations of both inorganic and organic compounds plays an important part in the work. Further, the study of analytic reactions and of analysis is taken up as far as the time permits. Besides the laboratory practice, the course includes class-room work as follows: From October 1 until the Christmas recess four exercises a week in general inorganic chemistry, based largely upon the laboratory work, and conducted by Professor Renouf. As a book of reference to be used in connection with the laboratory work of this part of the course, and also for general study, Remsen's "Inorganic Chemistry: Advanced Course,"

(Holt, New York) is recommended. From January 1 until the end of the year the study of the chemistry of the compounds of carbon is taken up, the class-room work, which is based upon Remsen's "Introduction to the Study of the Compounds of Carbon" (Heath, Boston), occupying four hours a week, under the guidance of Professor Morse.

Advanced work.—The greater part of the work in the advanced courses is carried on in the laboratory. The subject of qualitative analysis is taken up thoroughly after a careful study of reactions as laid down in the "Introduction to Chemical Analysis" by Volhard and Zimmerman, while at the same time the study of general chemistry is continued. A prolonged course in quantitative analysis follows. The analytical work, which is under the supervision of Professor Morse, requires about a year. After this, an opportunity is given for the preparation of a variety of compounds involving methods of general importance, or illustrating important classes. The course in the preparation of organic compounds is that laid down in Remsen's "Introduction to the Study of the Compounds of Carbon," supplemented by selections from Levy's "Anleitung zur Darstellung organischer Präparate," Fischer's book of the same title, and Gattermann's "Die Praxis des organischen Chemikers." Practice is also given in the methods for determining molecular weights by observations on the boiling-points and freezing-points of solutions. During the last year of his course the student undertakes an investigation generally under the guidance of one of the teaching staff, and, in case he is a candidate for the degree of Doctor of Philosophy, his thesis is based upon the results obtained in the course of the investigation. The more important parts of the thesis are afterwards published in the "American Chemical Journal."

Special lectures are offered to advanced students, the topics varying from year to year. From the beginning of the current year until Christmas Professor Remsen gave two lectures a week to graduate students on the Compounds of Carbon, and from January 1 until the end of the year he gave four lectures a week on this subject; Professor Morse gave one lecture a week throughout the year on analytical methods. From October to Christmas Dr. Randall gave a course of about twenty lectures on Physical

Chemistry. Throughout the year Dr. H. C. Jones gave a special course of lectures on Physical Chemistry twice a week. There was also a short course of lectures in the field of historical chemistry, in which the advanced students took part, each one working up an assigned topic, and presenting the results in the form of a lecture. Meetings were held weekly during the year to hear reports upon the more important articles in the journals of chemistry. Reports were furnished in turn by most of those who attended these meetings. Next year, 1896–97, Professor Remsen will lecture twice weekly during the first half-year on selected topics in advanced chemistry, for graduate students, and four or five times weekly during the second half-year on the chemistry of the compounds of carbon, for graduate students; Professor Morse will lecture once weekly on special topics in analytical chemistry. Lectures on Physical Chemistry will also be given as last year. The historical course and the journal meetings will be continued.

While, in the courses outlined above, the books mentioned are used as the guides, the instruction is in no case confined to what is presented in the book. Students are constantly referred to the journals and other publications containing articles bearing upon their work. Further, *the chief instruction in every course is that given in the laboratory.*

As regards the time required by a graduate student to complete the work for the degree of Doctor of Philosophy, it can only be said that one who has the necessary qualifications can generally do it in three years, after following such a course as that given to the undergraduates of this university who take the two years' course in chemistry. Those who have not had this preparation will generally require a longer time. There are no stereotyped courses leading to the higher degree, and it is impossible to say exactly what must be accomplished to attain it. What is desired is a certain maturity of mind with reference to the science of chemistry, and an ability to deal with chemical problems intelligently. This condition of mind is reached, if reached at all, by long-continued laboratory training accompanied by careful study of chemical journals and treatises. It may be said finally that the arrangements of the laboratory are made mainly with reference to those who wish to take up the study of chemistry in a

broad way, and that those who want short courses in special branches of chemistry are not advised to come here. It is believed that whatever object the student may have in view, whether he intends to teach or to follow some branch of applied chemistry, the best preparation he can have is a thorough training in the pure science.

The American Chemical Journal, edited by Professor Remsen, is now in its eighteenth volume.

Biology.

Instruction for both graduate and undergraduate students is given in the Biological Laboratory, a four-story building of eighty by fifty-four feet, opened in 1884, with large rooms for general and undergraduate work, separate work-rooms for students engaged in research, a small museum, and an herbarium. It is well equipped with apparatus and other facilities for training in the methods of experimental physiology, zoölogy, and botany, and for special investigations in these subjects. It contains a library with a very complete set of standard works, special treatises, reprints, dissertations, and the important physiological, zoölogical, and botanical journals.

Advanced Work.

Opportunities are given for advanced work in zoölogy, animal physiology, and botany.

A detailed account of the courses for each year may be found in the University Circulars and Announcements.

The work in Zoölogy is directed by Dr. W. K. Brooks, Professor of Zoölogy, assisted by Dr. E. A. Andrews, Associate Professor of Biology, and by laboratory assistants.

The studies which are carried on in the laboratory are supplemented by work at the Marine Station, which is established, from time to time, at suitable points upon the sea-shore; by special lectures; by weekly meetings of the zoölogical journal club for the discussion of current literature; and by the work of the zoölogical seminary, which meets three times a week.

The work of the seminary for the current year is based upon Lang's *Lehrbuch der Vergleichenden Anatomie*, and the work for the year 1896–7 will be based upon the *Lehrbuch der Vergleichenden Entwicklungsgeschichte*, by Korschelt and Heider.

These books are read in course, and each member is assigned topics upon which he prepares a report illustrated by reference to the original memoirs upon which the book is based, and by demonstrations from the specimens in the museum and cabinet of the laboratory.

One of the ordinary fellowships in the University is usually awarded, each year, to a graduate student in zoölogy, and, in the selection of the Bruce Fellow, preference is given to those who have held ordinary fellowships in zoölogy.

One of the graduate students in zoölogy may be appointed each year to occupy, during the summer months, the university table at the laboratory of the United States Fish Commission at Wood's Holl.

Whenever researches or parts of researches which have been carried on in the laboratory are completed and ready for publication, the University Circulars provide for the prompt publication of abstracts of the results.

Students looking forward to the degree of Doctor of Philosophy may offer zoölogy as a principal or as a subsidiary subject, but if they have not already pursued studies equivalent to the undergraduate courses in this laboratory, they will be required to take these courses. Those who make zoölogy their principal subject, may select, as subordinates, any two of these subjects, viz., animal physiology, botany, chemistry, geology, physics, or any other approved combination.

The work in Physiology is directed by Professor W. H. Howell, assisted by Dr. G. P. Dreyer. A course of lectures covering the general and special physiology of the animal body is given each year and is illustrated by a large number of class demonstrations. In connection with this series of lectures, a laboratory course in experimental physiology is offered extending over a period of twelve weeks and giving the student an introduction to the methods of laboratory technique. This general course of lectures is supplemented by advanced lectures given from time to time upon selected topics; by the work of the physiological seminary, which

meets at stated intervals for the special study of certain parts of physiology, and by a weekly journal club intended for the presentation and discussion of the material contained in the current periodicals.

In addition to the physiological literature contained in the library belonging to the laboratory, publications upon physiology and the related scientific branches of medicine may be obtained conveniently from the libraries of the Medical School, the Medical and Chirurgical Faculty of Maryland, and the Surgeon General's office in Washington.

Students looking forward to the degree of Doctor of Philosophy may offer Animal Physiology as a principal or as a subordinate subject. Those who take physiology as a principal subject, must present evidence of previous training in physics equivalent to the minor undergraduate course in this University, in chemistry equivalent to the minor and major undergraduate courses, and in biology equivalent to the minor and major undergraduate courses.

The laboratory is open also to special students, graduates in medicine and others, who may wish to undertake laboratory investigations, or desire to become acquainted with the use of physiological apparatus and the methods of demonstration and research.

The work in Botany is conducted, under the direction of Professor Brooks, by Dr. J. E. Humphrey and Dr. B. W. Barton. Dr. Humphrey will lecture on cryptogamic botany.

Students of botany have access to the extensive herbarium and valuable library of Captain J. Donnell Smith, to the Schimper herbarium, to the Fitzgerald collection of mosses, to Dr. Humphrey's collections of cryptogams, and to the local collections of the Field Club.

Botany may be taken as a principal or as a subordinate subject for the degree of Doctor of Philosophy.

Undergraduate Instruction.

The principle underlying the college training in biology is the postponement of specialization until a broad view of some of the general truths of biology has been obtained.

The aim is to train the powers of observation and reasoning, while the facts gained are such as may with advantage belong to

every well informed mind and may also form the basis for subsequent specialization.

The work of the first year (*Minor Biology*) is designed as part of the general education of every college student and is open to all candidates for the A. B. degree, as well as to special students. It is regarded as essential to all students intending to take up the study of medicine or to follow any line of applied biology, and it (or an equivalent) is required for entrance to the Medical School. This course may be taken without previous courses in physics and chemistry, but preparatory training of this character is strongly recommended. It is chiefly a laboratory course of two afternoons a week throughout the year, supplemented by four hours a week of lectures, recitations, and exercises designed to emphasize the more essential truths of biology. In the laboratory, each student studies with the microscope or dissects selected plants and animals from the simpler, such as amoeba and yeast, to the complex, such as the fern, the frog, the flowering-plant, and the rat; he studies directly the human skeleton and compares it with the skeletons of animals; and in the Spring he studies the life-history of the frog, the formation of the chick in the hen's egg, and the elements of systematic botany.

The work of the second year (*Major Biology*) is intended for those who have some special interest in biology. It is divided into three parts designed to give the student an acquaintance with the methods and principles of the scientific study of zoölogy, physiology, and embryology. The time required is the same as in the minor course.

There is also a short course in zoölogy offered as a two hour elective for students in other departments.

Pathology.

The Pathological Laboratory is a building of four stories on the grounds of the Johns Hopkins Hospital, with which it is connected. The autopsy theatre is in this building, which includes also rooms for pathological histology, bacteriology, experimental pathology, and private work. The museum contains a useful collection of morbid specimens.

The library of the Johns Hopkins Hospital, close to the laboratory, contains a large number of books of reference and receives regularly the chief medical and pathological journals.

Facilities are afforded for elementary and advanced study in general and special pathological anatomy, general pathology, and bacteriology. The instruction in pathology is given by Professor Welch and Dr. Flexner.

The instruction in pathology for matriculates in the Medical School continues throughout the second year of the regular medical course. It includes general pathology, gross morbid anatomy, pathological histology, and the technique of post-mortem examinations. The laboratory work occupies three half-days a week.

A course in pathological histology and clinical microscopy for physicians is given during the months of January, February, March, and April. This course presupposes on the part of the student a knowledge of normal histology. In connection with the course, demonstrations of fresh pathological specimens are made and opportunity is afforded to become familiar with the method of making post-mortem examinations. After the study of inflammation, the pathological histology of the different tissues and organs of the body is taken up in regular order. Microscopical sections are given to be stained, mounted, and carefully studied and drawn. The student is encouraged to do as much independent work as his time will permit. Those who wish short courses of a few weeks' duration in pathological and clinical microscopy are not advised to come here.

The instruction in bacteriology is given by Professor Welch and an assistant in bacteriology. In addition to the course for matriculates in the medical department, courses are given to physicians in this subject. Students are taught the preparation of culture-media, the principles of disinfection and sterilization, methods of cultivating, staining, and studying bacteria, particularly those of a pathogenic nature, and the biological examination of the air, water, and soil. This department is fully supplied with the requisite apparatus and cultures for bacteriological work.

In addition to the regular courses for medical students and physicians, opportunity is afforded for advanced work and special research in pathology and bacteriology. For these purposes the Pathological Laboratory is well equipped with the necessary

apparatus and material. Attention is paid to the pathological study of diseases of animals. Special subjects for research will be assigned to those who wish and are prepared to undertake original investigation.

The Pathological Laboratory being upon the same grounds with the Johns Hopkins Hospital and Dispensary, the opportunities are convenient and readily accessible for combining clinical studies with the work in pathology.

Three associations, the Hospital Medical Society, the Historical Club, and the Journal Club, meet in the Library of the Hospital, one each Monday evening. The libraries of the University and the Hospital are supplied with a large collection of medical books and periodicals, which are accessible to the student.

The Johns Hopkins Hospital Bulletin, issued monthly, and the Johns Hopkins Hospital Reports contain the proceedings of the Hospital societies, articles by the medical staff, and the results of researches conducted in the Hospital and the medical laboratories.

The Journal of Experimental Medicine, recently established under the editorial direction of Professor Welch, also contains reports of researches carried on in the physiological and pathological laboratories.

Drawing.

The instruction in drawing is arranged to give the student a general knowledge of the subject, as far as the time at his command will permit, while those who have particular aptitude for drawing are encouraged to follow courses of special instruction.

Undergraduates take up drawing as one of their required studies, unless they can show a fair degree of proficiency attained elsewhere. Graduate and special students are allowed the privilege of receiving such instruction in drawing as may be most helpful to them in their respective fields of work. Those who look forward to scientific pursuits, especially those who study natural history, physics, applied mathematics and mechanics, and electrical engineering, find these courses of great value.

The subject, therefore, divides itself into three distinct lines of work, to meet the particular requirements of the different classes

of students: (1) the course for undergraduates; (2) the courses of special instruction for graduate and other students; (3) the technical course for the students of electrical engineering.

The Undergraduate Course is designed to form part of the general education of the student. It aims to impart such knowledge of the principles of drawing, with extended practice in the application of the same, as shall best serve to educate the eye and to train the hand,—the one to see correctly and the other to express accurately the appearance of forms. The course includes freehand and mechanical drawing. Special students in subjects preliminary to the electrical engineering course are required to take all this work; other students may have the option of freehand drawing alone throughout the year, and drawings made in the course in systematic botany may be accepted as an equivalent for the work of the last twelve weeks of the course in freehand drawing. In the freehand drawing, the student is at once set to draw from models, beginning with elementary forms, and proceeding through a series of exercises till he is able to produce a fair drawing of any simple object or group of objects, in outline and in light and shade. The chief instruments used are charcoal and crayon. The use of drawing-instruments is taught, and the constructive processes are applied which are in general use in instrumental drawing. The elements of descriptive geometry are afterwards taken up in this course, and the fundamental principles of orthographic, scenographic, and isometric projections are worked out, and applied in carefully executed drawings, finished in ink. Precision and fidelity are insisted on and no careless work is allowed, nor is any copying permitted. Each student receives the personal attention and guidance of the instructor. With the exactness of pen-and-ink work on the one hand and the freedom of charcoal on the other, the student attains a power of graphic expression which will be of service to him in almost any pursuit.

The Special Instruction in drawing is necessarily of such a nature as is best adapted to the requirements of the individual student: freehand drawing from natural forms, in charcoal and in water color; from plaster casts, in charcoal and crayon; advanced work in descriptive geometry.

The Technical Course in mechanical drawing is especially planned to meet the requirements of the students of applied

electricity. It consists of a carefully systematized series of exercises and problems to familiarize the student with the best modern methods of the draughting room, and the acquisition of such skill in rapidly and accurately executing designs and drawings accordingly, as the time and the aptitude of the student permit.

The course extends over a period of two years. During the earlier months the time is occupied with a set of drawings to develop precision of measurement and acquaint the student with the standard conventionalities of the draughting room. Special instruction in the use of the various drawing instruments and appliances and their care is given during this time. Line drawing, tracing and blue-printing, the conventional colors, geometrical construction, projections, machine sketching and other important details of the draughtsman's work are then practised until the student has acquired proficiency. The advanced instruction, beginning with the middle of the first year, consists of the solution of problems in the kinematics of machinery on the drawing board, embracing many of the fundamental forms, and the constructions of linkage, cams, gear-trains, tooth outlines, etc., together with the tracing of the motions of detail mechanism and the kinematic relations of connected parts. This work is followed by the design of the details of special pieces of machinery, in whole or in part, to fulfil given conditions. The dimensions, detail drawings, tracings, and blue-prints are the result of the students' computations in the light of good current practice. This part of the work is accompanied by lecture-room instruction and the study of the textbook.

The concluding portion of the course embraces a similar method of teaching, the lecture-room and drawing-room work being so correlated that the student is continually in contact with his major subject. The course concludes with the designing of complete electric machines, dynamos, motors, or some important special type of machine. Students often make original designs, and not infrequently work out the details of their own inventions.

The instruction is of a personal nature, and the individual needs of each student are carefully watched and special aid given where required.

THE DEGREE OF DOCTOR OF PHILOSOPHY.

Regulations.

The degree of Doctor of Philosophy is here offered to students who have followed advanced courses of university study for a term of years, under suitable guidance and favorable conditions, and who have submitted an acceptable thesis and passed the prescribed examinations.

In order to be accepted by the Board of University Studies, as a candidate for the degree of Doctor of Philosophy, the student must give evidence that he has completed a liberal undergraduate course of academic study antecedent to the baccalaureate degree, such as is offered by colleges of good standing.

He must then follow advanced studies in the departments of knowledge which he may have chosen, and these studies must be pursued without serious distractions, under qualified teachers, for a period of at least three years. Private study, or study pursued at a distance from libraries and laboratories and other facilities, will not be considered as equivalent to university study.

The Board reserves the right to say in each case whether the antecedent training has been satisfactory, and, if any of the years of advanced work have been passed by the candidate away from this university, whether they may be rightly regarded as spent in university studies under suitable guidance and favorable conditions.

In order that students may receive the definite counsel of the proper authorities with respect to their future course, they are advised to offer themselves as "candidates" for this degree as soon as their purposes are formed. At least one academic year must be passed in this university, and in any case the year immediately preceding the final examinations.[1]

No one will be admitted to the degree of Doctor of Philosophy unless the Board is satisfied that he can translate at sight ordinary French and German into English; and those who are

[1] In case a student has complied with all the conditions and has practically completed his preparation for the final examinations, and is prevented by good reason from presenting himself, he should ask the Board to appoint a later day for his examination.

looking forward to the degree are earnestly advised to acquire this knowledge as early as possible, so that they may be enabled to read and consult the French and German works to which they will be constantly referred.

Correspondence on the foregoing matters should be addressed to the Registrar of the University, who will refer the letter, if there be occasion, to the teacher to whose department it relates.

Preliminary Test.

A student who is looking forward to taking the degree of Ph. D., must give notice of his intention early in his course to the Board of University Studies. In this preliminary notice he must designate the principal subject to which he intends to devote himself. The Board will then name an adviser for the candidate, with whom he shall from time to time consult.

Acceptance of the Candidate.

A student wishing to be considered a candidate for the degree must make a formal application to the Board of University Studies to be so enrolled, at least an academic year[1] in advance of the time when he expects to present himself for examination in his principal subject. Blank forms are provided for the purpose. His application will be referred to the examiners in French and German for their certificates, and, when so certified, to a committee consisting of the Professors in the several departments concerned. The student must appear before the committee and answer such inquiries in respect to his previous studies and his proposed course as the committee may ask. The committee shall report to the Board:

a. Whether the diploma submitted is satisfactory.

b. In case deficiencies in his previous training appear, whether they are such as he should be required to make up, or whether the committee discourages the continuation of his studies with reference to a degree.

c. Whether the committee approves the combination of studies which the candidate proposes to offer at his final examination.

The committee shall not prepare its report until after a joint conference of all its members with the student. After receiving

[1] The acceptance of a candidate by the Board at its first meeting in October is regarded as an acceptance at the beginning of an academic year.

this report from the committee, the Board will vote upon the acceptance of the candidate, and, should he be accepted, will inform him of any conditions which may be imposed.

Combination of Studies.

Every candidate for the degree of Ph. D. will be expected to name in his application the principal subject and the two subordinate subjects, which he wishes to follow. The subordinate subjects are of two grades and are known respectively as the first or principal subordinate and the second subordinate.

Requirements in the Subordinate Subjects.

Each of the subordinate subjects shall be followed by the candidate during a portion of his working time for at least one year of the total time devoted to graduate work, but not more than one-third of the total working time of one year shall be required in the case of the second subordinate, nor more than one-third of the total working time of two years in the case of the first subordinate.

If either of the subjects selected as subordinates involves laboratory work, not more than one-third of the working time of one year shall be required in that subject, except at the request of the adviser, whether that subject is taken as a first or as a second subordinate.

Thesis.

a. The thesis must be written on a theme approved by the adviser of the candidate, and must be completed and submitted to the Board at least four weeks before the written examinations are held, unless the adviser requests that, for reasons satisfactory to the Board, an exception be made. The thesis must be legibly written and paged and bound according to a prescribed form which can be seen in the Library.

b. The Board shall designate two members of the academic staff as referees, who shall present a written report on the thesis,—said report to be filed. In the intervals between the sessions of the Board, the President shall have power to appoint two referees.

c. The candidate shall print the thesis in full or in part,—if in part, to the extent of not less than twenty-four octavo pages,—under the supervision of his adviser, within one year of the time when the degree is conferred, and shall present one hundred and

fifty copies of the work to the University. A biographical sketch of the author shall be appended to the thesis in both its manuscript and its printed form.

d. If the thesis has not already been printed, a deposit of $50, to insure its printing within the specified period, shall be made by the candidate at the treasurer's office before the degree is conferred. This deposit shall be returned to him when the printed copies are presented to the University.

Written Examinations.

a. The candidate shall not be admitted to the written examination in the principal subject until the thesis is accepted (in whole or in part).

b. Twelve hours shall be allowed for the written examinations,—six hours for the principal subject, and three hours for each of the two subordinate subjects. No session shall last for more than three hours.

c. The candidate shall be permitted to take the written examination in both the first and second subordinates at the end of the respective years in which the courses in these subjects are completed, or whenever he is ready, at the discretion of the examiner.

d. If the candidate passes satisfactory written examinations during and at the end of the course in that subject which is taken by him as a second subordinate, he shall be absolved from further examination both written and oral in such subject.

e. Written reports on the result of the written examinations shall be laid before the Board and filed.

f. The questions and answers in the written examinations shall be laid before the Board at the oral examination of the candidate and the questions filed.

Oral Examinations.

The oral examinations shall be conducted by the Board. The time allotted to the examination shall be one hour, and three-fourths of this time shall be devoted to the principal subject.

Degree.

The names of the candidates found worthy of the degree will be submitted to the Board of Trustees, and with their approbation the degree will be publicly conferred.

COLLEGIATE INSTRUCTION.

GENERAL STATEMENTS.

The collegiate instruction of the University is intended to provide a thorough and systematic training in liberal studies. It is organized and administered with reference to the wants of two classes of persons,—first, those who look forward to an academic, professional, or literary career, and who desire such a discipline as shall best fit them for further study; and, second, those who do not intend to continue their studies beyond the period of the college course, and who wish to find in it a sufficient preparation for life. It is believed that the needs of both of these classes are met in the system which has been established; that a student who has passed through the regular collegiate training is prepared to undertake graduate studies or the work of the professional school, with special advantage, and that such a student, entering directly upon practical life, cannot fail to possess and to retain the aptitudes and sympathies of an educated man. The distinction between collegiate work, as relatively elementary, formal, and disciplinary, and the freer methods of more advanced instruction is definitely maintained, and it is felt that the effectiveness of the undergraduate teaching is increased, in no small degree, by the fact that it is given in connection with a developed system of higher courses, and in the presence of a large body of graduate scholars, who quicken by their example the younger students.

As an evidence that the collegiate course has been successfully completed, the degree of Bachelor of Arts is conferred at its close. The degree signifies, in the case of every recipient, such instruction in ancient and modern languages, in mathematics, in the physical and natural sciences, in literature, philosophy, and history, as is believed to be essential to a liberal education. Opportunity is given, however, to vary the proportion of these studies, in accordance with individual tastes and needs, through the organization of several distinct and parallel courses of instruction, known as

"groups." These are seven in number, each comprising (1) studies common to all the groups and required of all undergraduates, (2) studies peculiar to a group, (3) optional studies. The groups are assumed to be equally honorable and difficult, and are intended to combine liberty of election on the part of the student with sufficient exercise of authority to prevent discursive and ill-considered work. Each group contains two principal studies, both of which extend through two years of instruction. These are: (1) Latin and Greek, (2) Mathematics and Physics, (3) Chemistry and Biology, (4) Physics and Chemistry, (5) Latin and Mathematics, (6) History and Political Science, (7) English, with German or French.

After matriculation, the student is expected to follow one of these groups; but, as stated below, they may be to some extent modified, provided only that the amount of required study shall not be diminished, and that the education received shall be partly literary and partly scientific.

To matriculated students, the following courses are now open:

A.		B.		C.
Mathematics	I	Latin	I	Drawing
Mathematics	II	Latin	II	Vocal Culture
Physics	I	Greek	I	Physical Culture
Physics	II	Greek	II	
Chemistry	I	French	I	
Chemistry	II	French	II	
Biology	I	German	I	
Biology	II	German	II	
Geology	I	Italian	I	
		Spanish	I	
		English	I	
		English	II	
		Rhetoric	I	
		English Literature	I	
		History	I	
		History	II	
		Political Science	I	
		Political Science	II	
		Logic, Psychology, Ethics	I	

[*Note.* To follow course II in any subject, the student must first have absolved I.]

In addition, a number of courses, most of which are of two hours a week, are offered. One of these must be chosen by each student in his third year. Among them are courses in Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, Italian, Spanish, English Literature, History of Philosophy (one hour), Comparative Philology (one hour).

In order to receive the degree of Bachelor of Arts, the candidate must, in addition to all the requirements for admission and matriculation, absolve—

(*a*) The following prescribed courses: Rhetoric; English Literature; Economics and History; Philosophy; the minor course in French and the minor in German; exercises in English Composition, as prescribed by the Collegiate Professor of English; Drawing; Physical and Vocal Culture.

(*b*) Five courses, each occupying four hours weekly for one year, of which at least one must be a major course, and at least one must be a laboratory course*; also an elective course, two hours weekly, during the third year.

The student may follow strictly the group which he has chosen; or, under the regulations above stated, he may substitute, with the approval of his adviser, other studies for two—in certain cases, for three—of the courses laid down in his group.

Students who have passed French or German as the principal subject in place of Greek for matriculation, are required to substitute for it some other subject, or to take an advanced course in one of these languages; any undergraduate course approved by the adviser may be chosen for this purpose.

In these ways the course of study in the several groups may be modified; while those who wish to concentrate their attention in the more thorough study of a special field, will find it advantageous to accept the groups as they stand.

The optional courses in Science and Literature vary from year to year, and may be followed by the student according to his tastes and acquisitions. The arrangements of the University allow those who have capacity for more than is prescribed, to broaden their studies by attendance upon the public lectures from time to time provided; and, if time permits, they may also take longer or shorter courses not actually required of them.

*If the major course selected be a laboratory course, an additional laboratory course will not be required.

Candidates for the degree of Bachelor of Arts must pursue the last year of their undergraduate course in this institution. Regular attendance upon the prescribed exercises is required, and the degree is conferred only when the records show that all examinations have been passed, and that the appointed amount of work has been satisfactorily completed.

ADVISERS.

Before an undergraduate student begins his academic work, the President will designate one of his principal instructors to act as his Adviser. It is expected that every Adviser will establish relations of friendliness and confidence with the students assigned to his care. No instructor will receive into a class any student who does not bring with him (in a book provided for that purpose) assurance that his Adviser approves his pursuing the study at that time; and no student is allowed, without the consent of his Adviser, to discontinue any work.

CHARACTERISTICS OF THE VARIOUS GROUPS OF STUDY.

Each group contains twelve courses. Eight of these are four-hour courses,—each representing four hours of class-work weekly for a year. Of the others, two—the course in Rhetoric and that in English Literature—are three-hour courses; one is an elective of two hours in the third year; and one—the course in Philosophy—occupies five hours weekly through one year. Rhetoric, English Literature, and Philosophy form a part of each group. A course in Economics and History is also included in each group. Each group contains at least one year of French and one year of German, and at least one year of attention to a scientific subject, including the performance of the work prescribed in the laboratory. The instruction in Drawing and in Vocal and Physical Culture is additional to these twelve courses.

1. *The Classical Group.*

The Classical group corresponds in the main to what has been the ordinary course of study in our colleges, the requisite mathematics having been secured before matriculation. The emphasis

is laid upon Latin and Greek, each of which is studied two years. Rhetoric, English Literature, French, German, one subject involving a year of laboratory work, Economics and History, Comparative Philology, Philosophy, and an elective subject occupying two hours weekly in the third year, are also included, together with Drawing and Vocal and Physical Culture.

2. *The Mathematical-Physical Group.*

The Mathematical-Physical group substitutes two years of Mathematics and two years of Physics for Latin and Greek, adding also a year of Chemistry, the other studies being the same as in the classical group. This course affords a good basis for the subsequent study of Electricity, Engineering, Astronomy, and other subjects largely dependent on the science of Mathematics.

3. *The Chemical-Biological or Preliminary Medical Group.*

The Chemical-Biological group fits the student to enter at once upon the studies of the Johns Hopkins Medical School, and is also a good preparation for the study of medicine elsewhere, or for the professional study of Natural History. It provides instruction in Physics, Chemistry, and Biology, with laboratory practice. The requirements in French, German, English, History, and Philosophy are the same as in the other groups.

4. *The Physical-Chemical Group.*

The Physical-Chemical group is intended to lead to scientific pursuits which are neither chiefly mathematical nor chiefly biological,—to provide an education in scientific studies for one who has not chosen his specialty. It is identical with the second group, except in the relative time allotted to Mathematics and Chemistry, the latter subject extending through two years and the former through one.

5. *The Latin-Mathematical Group.*

The Latin-Mathematical group affords a good fundamental training, without the study of Greek. It differs from the classical group, only in substituting Mathematics for Greek.

6. *The Historical-Political Group.*

The Historical-Political group furnishes a basis for the subsequent study of law. It omits Greek and retains but one year of Latin, providing two years of History and two years of Political Science.

7. *The Modern Language Group.*

The Modern Language group is designed for those who wish a literary training based upon the modern rather than upon the ancient languages. It substitutes for Greek two years of English, and, retaining one year of Latin, substitutes for the other an additional year of either French or German. If the student is already proficient in French or German, he may substitute a year of Spanish or Italian for one of these languages.

Matriculated students and candidates for matriculation must take up and complete the course in Drawing in their first year, unless the Board of Advisers, for special reasons, permit delay until the second year. Special students who have subsequently matriculated, must complete the course immediately after their matriculation.

ADMISSION TO COLLEGIATE COURSES.

Those who wish to pursue undergraduate courses, are expected to appear at the regular times appointed for examination in June and October. Persons at a distance desiring information are requested to write for a blank form of "Application for Admission," which may be filled up and returned to the University. Upon its receipt, such counsel will be given as the case requires.

Matriculated Students.

Students who fully meet at entrance the requirements for matriculation (as stated on pages 155–157), and who maintain a satisfactory standing in the full work of each year, may be graduated in three years.

The matriculation examination may be divided, and a part of the subjects passed in one year and the rest a year later, according to the regulations prescribed below (see page 158).

When a school, approved by the Academic Council, shall certify that a candidate has satisfactorily completed *all the studies requisite for matriculation*, such candidate will be exempted from examination in all except the following subjects: Trigonometry, Analytic Geometry, Cicero or Vergil (as the candidate may prefer), Latin Prose Composition, Homer or Herodotus (as the candidate may prefer), Greek Prose Composition, the minor courses in French and German, English, and Science. The examination in these subjects may be divided between June and October of the same year, but, except in the case of English, not between successive years.

Candidates for Matriculation.

The matriculation examination may be passed at entrance by those who have completed the courses now offered in several preparatory schools of Baltimore. Persons taught elsewhere are often unable to obtain instruction in all the subjects requisite for matriculation. To meet the needs of such students, terms of admission are offered (as described on pages 158, 159), corresponding to the terms of admission to other colleges of established reputation. Students who satisfy these requirements may be admitted to the course of study stated on page 161. In the case of such persons, a residence of four years will be necessary to the attainment of the degree of Bachelor of Arts.

Special Students.

The University discourages from entering as special students those who are not qualified, by age, character, attainments, and habits of study, to attend its classes and lectures with profit to themselves and credit to the institution. The authorities, however, are ready to receive, as special students, properly qualified persons who have some good reason for not pursuing the full course. A special examination is arranged for such persons (see page 159). Many excellent students have been thus enrolled, among whom not a few have subsequently changed their plans, passed the matriculation examination, and at length received the degree of

Bachelor of Arts. The privilege once accorded will be forfeited at any time, if the student is found unworthy of it.

Requirements for Matriculation.

1. *Mathematics.* Algebra, Plane and Solid Geometry, Plane Trigonometry, and Analytic Geometry.

The requirements in Algebra include the following subjects:

(*A*). The fundamental rules, use of parentheses, factoring, greatest common divisor, least common multiple, equations of the first degree in one or more unknown quantities, and problems leading to such equations, fractions, inequalities, involution and evolution, theory of exponents, radicals, imaginaries, quadratic equations and problems leading to quadratics.

(*B*). Equations solved like quadratics, simultaneous quadratic equations, theory of quadratic equations, ratio and proportion, the progressions, the binomial theorem, logarithms, permutations and combinations.

The requirements in Plane and Solid Geometry and in Trigonometry are indicated in the ordinary text-books of these subjects.

The subjects required in Analytic Geometry are the straight line in rectangular coördinates, transformation of coördinates, loci, and plotting of curves.

Substitution: Students selecting groups which do not include Minor Mathematics or Major Physics, may, in case they offer Greek for matriculation, substitute for Analytic Geometry the *elements* of French or of German (4 (*b*) or 5 (*b*), page 156).

A competent knowledge of Arithmetic (including the metric system) is assumed.

2. *Latin.* Cæsar, *Gallic War*, books i–v; Vergil, *Eclogues* and *Aeneid*, books i–vi; Ovid (Allen and Greenough's Ovid, pp. 1–74, 176–195, or Kelsey's); Cicero, the four orations against Catiline, *de imperio Pompeii*, *pro Archia*, and *in Verrem*, *actio I;* translation of easy English prose into Latin.

Substitution: Sallust's *Catiline* may be substituted for the fifth book of Cæsar, and Cicero's *de Senectute* for the *de imperio Pompeii.*

The examination will test the power of exact and idiomatic translation, the knowledge of forms, of syntax, and of prosody. In certain cases a candidate may be allowed to take an oral instead of a written examination. If, for instance, he has not been prepared on the books above prescribed, but has read about the same amount in other books, he may be examined on these.

3. *Greek.* Xenophon, *Anabasis*, books i–iv; Homer, *Iliad*, books i–iv; Herodotus, book vii; translation of easy English prose into Greek.

Candidates will be expected to show an accurate knowledge of forms, and an acquaintance with the common rules of syntax and accent, and with the prosody of the Homeric poems.

In case any candidate has made his preparation by the study of books other than those named above, or for any reason believes that an oral examination would be for his advantage, he may be examined upon easy passages previously unseen; if he acquits himself well, he will be required to put on paper only the passage given to be translated into Greek prose.

4, 5. *German and French.* Candidates not offering Greek must offer one of the following combinations. In one of these languages the elements are required; in the other, an amount of knowledge equal to that represented by the minor or first year's collegiate course:

4.

(*a*) *German.*

Otis's *Elementary German.*
Buchheim's *German Reader, Part I,* and 71 pp. of *Part II.* (Clarendon Press).
Schiller, *Wilhelm Tell* (Clarendon Press, large edition).
Goethe, *Egmont* (ed. Buchheim).
Lessing, *Minna von Barnhelm* (Clarendon Press).
Heine, *Harzreise* (Clarendon Press).
Freytag, *Aus dem Staate Friedrichs des Grossen* (ed. Hager).
Prose Composition (Whitney's *Grammar,* Exercises, 2d Series).

(*b*) *French.*

Whitney's *Grammar, Part I.*
Super's *French Reader, Parts II, III, IV;* De Vigny, *La Canne de Jonc* (ed. Spiers).

5.

(*a*) *French.*

Whitney's *Grammar, Parts I* and *II,* substituting for the exercises of *Part II* "*Materials for French Composition, Part I,* based on Halévy's *L'Abbé Constantin,*" (ed. Grandgent; Heath & Co.).
Super's *French Reader, Parts II, III, IV;* De Vigny, *La Canne de Jonc* (ed. Spiers); Mérimée, *Colomba;* Daudet, *Contes* (ed. Cameron).
Molière, *L'Avare;* Hugo, *Hernani* (ed. Matzke); Augier, *Le Gendre de M. Poirier;* Sandeau, *Mlle. de la Seiglière* (ed. Warren.)

(*b*) *German.*

Otis's *Elementary German.*
Buchheim's *German Reader, Part I,* pp. 3–68.
Meissner's *German Conversation,* pp. 1–68.

The amount of German and French accepted as a substitute for Greek at matriculation may not count also as a part of the work required for graduation.

Reading at Sight.—The language papers, both ancient and modern, will contain one passage, or more, of moderate difficulty, not included in the prescribed lists. A good handling of passages previously unseen will go far toward compensating for deficiencies in the formal requirements. This does not apply, however, to the examination in the *elements* of French and German.

6. *English.*—The examination will consist of two parts:

I. *Reading.*—The candidate will be required to write a paragraph or two on each of several topics chosen by him from a considerable number—perhaps ten or fifteen—set before him in the examination paper. This part of the examination is designed, primarily, to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. As additional evidence of preparation, the candidate may present an exercise book, properly certified by his instructor, containing compositions or other written work.

The books set for this part of the examination will be:—

In 1896: Shakespeare's *A Midsummer Night's Dream;* Irving's *Tales of a Traveller;* Scott's *Woodstock;* Macaulay's *Essay on Milton;* Longfellow's *Evangeline;* George Eliot's *Silas Marner.*

In 1897: Shakespeare's *As You Like It;* Irving's *Tales of a Traveller;* Hawthorne's *Twice Told Tales;* Longfellow's *Evangeline;* George Eliot's *Silas Marner.*

In 1898: Milton's *Paradise Lost,* Books I and II; Pope's *Iliad,* Books I and XXII; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *Ancient Mariner;* Carlyle's *Essay on Burns;* Lowell's *Vision of Sir Launfal;* Hawthorne's *The House of the Seven Gables.*

In 1899: Dryden's *Palamon and Arcite;* Pope's *Iliad,* Books I, VI, XXII, XXIV; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *Ancient Mariner;* De Quincey's *The Flight of a Tartar Tribe;* Cooper's *The Last of the Mohicans;* Lowell's *Vision of Sir Launfal;* Hawthorne's *The House of the Seven Gables.*

II. *Study and Practice.*—This part of the examination presupposes the careful study of each of the works named below. The examination will be upon subject-matter, form, and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy.

The books set for this part of the examination will be:—

In 1896: Shakespeare's *The Merchant of Venice;* Milton's *L'Allegro* and *Il Penseroso;* Webster's *First Bunker Hill Oration.*

In 1897: Shakespeare's *The Merchant of Venice;* Burke's *Speech on Conciliation with America;* Scott's *Marmion;* Macaulay's *Life of Samuel Johnson.*

In 1898: Shakespeare's *Macbeth;* Burke's *Speech on Conciliation with America;* De Quincey's *The Flight of a Tartar Tribe;* Tennyson's *The Princess.*

In 1899: Shakespeare's *Macbeth;* Milton's *Paradise Lost,* Books I, II; Burke's *Speech on Conciliation with America;* Carlyle's *Essay on Burns.*

The reading and study of the works named above is recommended to all candidates; equivalents will, however, be accepted, provided that the amount of reading be about equally divided between prose and verse.

In connection with the reading and study of the required books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be memorized. The essentials of English grammar should not be neglected in preparatory study.

Note.—No candidate will be accepted in English whose work is notably defective in point of spelling, punctuation, idiom, or division into paragraphs.

While candidates will be permitted to take the entire examination at entrance, it is strongly recommended that Part I be taken as a preliminary examination, and Part II as a final examination. Candidates will thus have an opportunity to make up deficiencies which may be discovered at the preliminary examination, and to enter the University without a condition in English.

7. *History.*—The outlines of the History of England and the United States, or of the History of Greece and Rome, and the outlines of Geography.

Gardiner's English History for Schools and Johnston's History of the United States for Schools are recommended as sufficient for candidates in modern history; Oman's Greece and Allen's Rome, for candidates in classical history.

8. *Science.*—The elements of Chemistry, Botany, or Physical Geography.

The examination is intended to determine whether the candidate has a knowledge of the elementary facts of one of these sciences, based on practical study. Those who take the examination in Chemistry will be examined in Remsen's "Elements of Chemistry," and will be required to have performed the experiments described in Remsen's "Laboratory Manual," and to present their laboratory note-books for examination. The requirements in Botany will be a knowledge of the structure of plants, such as may be

obtained from a study of Spaulding's "Introduction to Botany," excluding the microscopic work, and the ability to use Gray's Manual in determining the species of flowering plants. The examination will be mainly practical. In order to absolve the requirements in Physical Geography, the student must pass an examination on Hinman's "Eclectic Physical Geography."

Division of the Matriculation Examination.

A student may pass a part of the matriculation examination one year before his admission to the University, and receive credit for the same under the following conditions:

In his application he must distinctly declare his intention to divide the examination. The subjects thus passed will not count towards matriculation, unless the candidate completes his matriculation the following year. The first part of the divided examination will be confined to the following subjects, of which the candidate will be expected to pass in English (part I), Algebra, one Latin author, and three of the remaining subjects:

English (part I).
Algebra (A). (See page 155).
Plane Geometry.
Cæsar, *Gallic War*, books i–v.
Vergil, *Aeneid.*
Xenophon, or French, or German (see statement below).
History of the United States or of Greece.
History of England or of Rome.
Science.

If French or German is offered in place of Xenophon, the candidate will be examined as follows:

In *German:* Otis's *Elementary German;* Buchheim's *German Reader, Part I,* and 71 pages of *Part II;* Schiller's *Wilhelm Tell;* Prose Composition, sentences of moderate difficulty to be translated into German at sight.

Or in *French:* Whitney's *Grammar, Part I,* with the exercises; Super's *French Reader, Parts II, III, IV;* Mérimée, Sandeau, De Vigny, Augier, Daudet—(as on page 156); Prose Composition, sentences of moderate difficulty to be translated into French at sight.

The whole of the above amounts must be offered.

Requirements for Admission as a Candidate for Matriculation.

1. *Mathematics.* Algebra (A and B); Plane Geometry,—the same amount as for matriculation. (See page 155).
2. *Latin.* Cæsar, *Gallic War,* books i–iv; Vergil, *Aeneid,* books i–vi; Cicero, four orations against Catiline, *de imperio Pompeii, pro*

Archia; Ovid, 1,000 lines (Allen and Greenough's Ovid, pp. 1–33, 176–180, or Kelsey's); translation of easy English prose into Latin.

3. *Greek.* Xenophon, *Anabasis,* books i–iv; Homer, *Iliad,* books i–iii; translation of easy English sentences into Greek.
4. *German and French* (in substitution for *Greek*).
   German. Otis's *Elementary German;* Buchheim's *German Reader, Part I,* pp. 3–68; Meissner's *German Conversation,* pp. 1–68.
   French. Whitney's *Grammar,* Part I; Super's *French Reader, Parts II, III, IV;* De Vigny, *La Canne de Jonc* (ed. Spiers).
5. *English.* The same as for matriculation. (See pages 156 and 157).
6 and 7. *History* and *Science* (as for matriculation). (See page 157).

Requirements for Admission as a Special Student.

Before an undergraduate is admitted to any special course, he will be required, unless expressly excused for definite reasons, to pass the regular matriculation examinations in the following subjects:

1. *English.*
2. *Algebra* (A and B).
3. *Plane and Solid Geometry.*
4. *Latin.* Cæsar, *Gallic War,* books i–iv; Cicero, six orations; Vergil, *Aeneid,* books i–vi, and *Eclogues.*
5. *Greek.* Xenophon, *Anabasis,* books i–iv; Homer, *Iliad,* books i, ii.

Substitution: *French and History,* or *German and History.* Students who do not offer Greek, will be examined in French or German as specified under "Division of the Matriculation Examination," and in the History of Greece and Rome. Oman's Greece and Allen's Rome are recommended.

6. *Science.*
7. *History of the United States.* A knowledge of the principal facts is required.

Undergraduates applying for admission as special students in subjects preliminary to the course in Applied Electricity (see page 124) will be required to pass in English, United States History, and Science, in French or German as specified under "Division of the Matriculation Examination," and in *all the mathematical subjects necessary for matriculation.* These candidates will not be permitted to divide the entrance examination between successive years.

EXAMINATIONS AND REPORTS.

Each instructor will file in the office, about the time of the winter and spring recesses and at the close of the year, a report of the progress of each member of his classes, deduced from daily observation, or examinations, or both. These reports are called the Intermediate Records. Other reports (*e. g.* of private readings, or of the completion of a particular book or subject) may be made by the instructor at any time.

At the close of the year, the University holds an examination of each class on the whole year's work, known as the University Examination, the report of which, certified by the University Examiner and the Instructor, is also put on file in the office.

From the Intermediate Records and the Reports of the University Examination, the Board of Collegiate Advisers will cause to be made up an average mark, on the authorized scale, for the work of the whole year of each student in each minor or major subject, which alone will determine the standing of any candidate for honors. This constitutes the Final Record.

The reports of all these examinations are carefully recorded and preserved, and the degree of Bachelor of Arts is conferred when the records show that the prescribed amount of work has been satisfactorily completed.

Whatever course has been followed, satisfactory certificates must be presented from the teachers of drawing, physical training, and vocal culture, and also of French and German, if these languages have not been studied in the regular course taken. One or more of the essays which the candidate has written, copied by his own hand in a prescribed style, must be presented, before the first of May annually, to the Registrar for presentation to the Board of Collegiate Advisers. In all cases the candidate must pursue the last year of his undergraduate course in this institution, and must have completed his matriculation before entering upon that year, unless, for special reasons, the Board of Advisers shall have permitted a postponement of some portion of the matriculation requirements. Such special reasons must, in all ordinary cases, be submitted to the Board not later than the close of the year preceding the last; and in no case will they be considered later than October of the last year.

SCHEDULE OF COLLEGE COURSES.

COURSE OF STUDY PRESCRIBED FOR CANDIDATES FOR MATRICULATION.

This course will extend through an academic year.

1. MATHEMATICS. Four hours weekly.
   Algebra (special topics).
   Solid Geometry.
   Plane Trigonometry.
   Analytic Geometry (straight line and loci).

2. LATIN. Three hours weekly.
   Cicero, *De Senectute.*
   Sallust, *Catilina.*
   Ovid, *Amores* and *Tristia.*
   Vergil, *Georgics* (selections).
   Sight Reading and Prose Composition.

3. GREEK. Three hours weekly.
   Homer, *Iliad*, book vi.
   Herodotus, book vii.
   Sight Reading and Prose Composition.

4. GERMAN OR FRENCH (for students not offering Greek). Four hours weekly. The minor course (see Groups II–VII).

   GERMAN OR FRENCH (for students offering Greek). Three hours weekly.
   German: Thomas, *Practical German Grammar;* Buchheim's *German Reader, Part I;* Meissner's *German Conversation;* Fouqué, *Undine.*
   French: Grandgent's *Short Grammar,* and *Exercises* based on Super's *French Reader;* Super's *French Reader;* Hugo, *La Chute;* De Vigny, *Le Cachet Rouge.*

5. RHETORIC AND ENGLISH COMPOSITION. Three hours weekly.
   Principles of Rhetoric.
   Rhetorical Analysis.
   Practice in Writing.
   (Students taking Greek may defer this course until after matriculation.)

6. FREEHAND AND MECHANICAL DRAWING.

After matriculation, one of the Groups described in the following pages will be selected.

Groups offered to Matriculated Students.

First Group. (*Classical*).

First Year.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book i).
Quintus Curtius (book iii).
Horace, *Ars Poetica.*
Phædrus (selections).

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

GREEK.

CLASS WORK. (1 p. m.) *Four hours weekly.*

Lysias (select orations).
Homer, *Odyssey* (four books).
Euripides (one play).
Prose Composition.

PRIVATE READING:

Xenophon, *Hellenica* (book i).
Plato, *Apology.*

LABORATORY COURSE. *Four hours class-work weekly.*

Chemistry* (9 a. m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.).
} Lectures, recitations, and laboratory work.

Second Year.

LATIN.

CLASS WORK. (10 a. m.) *Four hours weekly.*

Catullus.
Tibullus.
Terence, *Phormio.*
Plautus, *Captivi.*
Reading at Sight.
Prose Composition.

PRIVATE READING:

Propertius.
Plautus, *Miles Gloriosus.*

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

GREEK.

CLASS WORK. (12 m.) *Four hours weekly.*

Thucydides (one book).
Selections from the elegiac, melic, and iambic poets.
Sophocles (one play).
Reading at sight.
Prose Composition.

PRIVATE READING:

Æschylus (one play).
Aristophanes (one play).

GERMAN.** (11 a. m.) *Four hours weekly.*

Otis's *Elementary German.*
Whitney's *Grammar.*
Brandt's *German Reader.*
Von Moser, *Der Bibliothekar.*
Goethe, *Egmont.*
Prose Composition.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Mediæval History. } *Two hours.*
Modern Europe. }
Elements of Economics. } *Two hours.*
Applied Economics. }

ELECTIVE COURSE.† *Two hours weekly.*

FRENCH.** (12 m.) *Four hours weekly.*

Whitney's *Brief Grammar.* Exercises in Grammar and Composition.
Grandgent's *Exercises* based on Super's *French Reader.*
Super's *French Reader;* Dumas, *L'Evasion du Duc de Beaufort;* Mérimée, *Colomba;* Augier, *Le Gendre de M. Poirier.*

COMPARATIVE PHILOLOGY.

One hour weekly.

* If Chemistry be chosen, it should be taken in the second year, and German in the first year.

† For 1896–97, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, Italian, Spanish, English Literature, History of Philosophy (one hour).

** Students in other groups are required to complete the amount of work in French and German laid down in those groups.

Second Group. (*Mathematical-Physical*).

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* Seidel, *Novellen.*
- History of Modern German Literature.
- Composition.
- Sight Reading.
- Private Reading: Lessing, *Emilia Galotti;* Gutzkow, *Zopf und Schwert.*

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- General Chemistry.
- Laboratory Work. (*Five hours weekly.*)

MATHEMATICS. (1 p. m.) *Four hours weekly.*
- Plane Analytic Geometry.
- Differential and Integral Calculus.

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

Second Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
- Elementary Mechanics.
- Heat.
- Electricity and Magnetism.
- Sound.
- Light.
- Laboratory Work. (*Three hours weekly.*)

MATHEMATICS. (9 a. m.) *Four hours weekly.*
- Determinants.
- Theory of Equations.
- Differential and Integral Calculus (special topics).
- Plane Analytic Geometry (advanced).
- Solid Analytic Geometry.

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Moliere, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche, *La Poudre aux Yeux;* Sandeau, *Mlle. de la Seigliére.*
- Short Outline of French Literature (XVII–XIX Centuries).
- Prose Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) (*Four hours weekly.*)
- Mediæval History. } *Two hours.*
- Modern Europe.
- Elements of Economics. } *Two hours.*
- Applied Economics.

PHYSICS. (12 m.) *Four hours class-work weekly.*
- Mechanics.
- Elementary Thermodynamics.
- Elementary Theory of Electricity and Magnetism.
- Wave Theory of Light.
- Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.* *Two hours weekly.*

* For 1896–97, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Third Group. (*Chemical-Biological*).

First Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
- Elementary Mechanics.
- Heat.
- Electricity and Magnetism.
- Sound.
- Light.
- Laboratory Work. (*Three hours weekly.*)

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- General Chemistry.
- Laboratory Work. (*Five hours weekly.*)

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* Seidel, *Novellen.*
- History of Modern German Literature.
- Composition.
- Sight Reading.
- Private Reading: Lessing, *Emilia Galotti;* Gutzkow, *Zopf und Schwert.*

Second Year.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- Supplementary Course in Inorganic Chemistry.
- Chemistry of Carbon Compounds.
- Laboratory Work. (*Five hours weekly.*)

BIOLOGY.* (10 a. m.) *Four hours class-work weekly.*
- General Biology: Comparative study of selected animals and plants; study of the human skeleton; elements of embryology and of botany.
- Laboratory Work. (*Five hours weekly.*)

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche, *La Poudre aux Yeux;* Sandeau, *Mlle. de la Seigliére.*
- Short Outline of French Literature (XVII–XIX Centuries).
- Prose Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

Third Year.

BIOLOGY. (9 a. m.) *Four hours class-work weekly.*
- Animal Physiology and Histology.
- Elements of Zoölogy.
- Botany.
- Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.† *Two hours weekly.*

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
- Mediæval History. } *Two hours.*
- Modern Europe. }
- Elements of Economics. } *Two hours.*
- Applied Economics. }

*Students who propose to enter the Medical School, may postpone this course until the third year, taking History and Economics in the second year, and substituting another course for the third year Biology.

†For 1896–97, elective courses are offered in the following subjects: Differential Equations, Astronomy, Hebrew, Latin, Greek, German, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Fourth Group. (*Physical-Chemical.*)

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* Seidel, *Novellen.*
- History of Modern German Literature.
- Composition.
- Sight Reading.
- Private Reading: Lessing, *Emilia Galotti;* Gutzkow, *Zopf und Schwert.*

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- General Chemistry.
- Laboratory Work. (*Five hours weekly.*)

MATHEMATICS. (1 p. m.) *Four hours weekly.*
- Plane Analytic Geometry.
- Differential and Integral Calculus.

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

Second Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
- Elementary Mechanics.
- Heat.
- Electricity and Magnetism.
- Sound.
- Light.
- Laboratory Work. (*Three hours weekly.*)

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- Supplementary Course in Inorganic Chemistry.
- Chemistry of Carbon Compounds.
- Laboratory Work. (*Five hours weekly*).

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche, *La Poudre aux Yeux;* Sandeau, *Mlle. de la Seiglière.*
- Short Outline of French Literature (XVII–XIX Centuries.)
- Prose Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
- Mediæval History. } *Two hours.*
- Modern Europe. }
- Elements of Economics. } *Two hours.*
- Applied Economics. }

PHYSICS. (12 m.) *Four hours class-work weekly.*
- Mechanics.
- Elementary Thermodynamics.
- Elementary Theory of Electricity and Magnetism.
- Wave Theory of Light.
- Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.* *Two hours weekly.*

* For 1896–97, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Fifth Group. (*Latin-Mathematical.*)

First Year.

LATIN.

CLASS WORK. (9 a.m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book i).
Quintus Curtius (book iii).
Horace, *Ars Poetica.*
Phædrus (selections).

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

GERMAN. (11 a. m.) *Four hours weekly*

Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* Seidel, *Novellen.*
History of Modern German Literature.
Composition.
Sight Reading.
Private Reading: Lessing, *Emilia Galotti;* Gutzkow, *Zopf und Schwert.*

LABORATORY COURSE. *Four hours class-work weekly.*

Chemistry* (9 a.m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.).
} Lectures, recitations, and laboratory work.

Second Year.

LATIN.

CLASS WORK. (10 a.m.) *Four hours weekly.*

Catullus.
Tibullus.
Terence, *Phormio.*
Plautus, *Captivi.*
Reading at Sight.
Prose Composition.

PRIVATE READING:

Propertius.
Plautus, *Miles Gloriosus.*

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

FRENCH. (12 m.) *Four hours weekly.*

Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche, *La Poudre aux Yeux;* Sandeau, *Mlle. de la Seiglière.*
Short Outline of French Literature (XVII–XIX Centuries).
Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
Private Reading.

MATHEMATICS. (1 p. m.) *Four hours weekly.*

Plane Analytic Geometry.
Differential and Integral Calculus.

Third Year.

MATHEMATICS. (9 a. m.) *Four hours weekly.*

Determinants.
Differential and Integral Calculus (special topics).
Theory of Equations.
Plane Analytic Geometry (advanced).
Solid Analytic Geometry.

ELECTIVE COURSE.† *Two hours weekly.*

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Mediæval History.
Modern Europe.
} *Two hours.*

Elements of Economics.
Applied Economics.
} *Two hours.*

*If Chemistry be chosen, it should be taken in the third year, and Minor and Major Mathematics in the first and second years respectively.

† For 1896–97, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Sixth Group. (*Historical-Political.*)

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* Seidel, *Novellen.*
- History of Modern German Literature.
- Composition.
- Sight Reading.
- Private Reading: Lessing, *Emilia Galotti;* Gutzkow, *Zopf und Schwert.*

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

ANCIENT HISTORY. (10 a. m.) *Four hours weekly.*
- Origin of Civilization.
- Greece.
- Rome.
- Readings from Classical Historians.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*
- Livy (two books).
- Horace (selections).
- History of Roman Literature.
- Sight Reading.

PRIVATE READING:
- Cæsar, *Bellum Civile* (book i).
- Quintus Curtius (book iii).
- Horace, *Ars Poetica.*
- Phædrus (selections).

Second Year.

HISTORY. (11 a. m.) *Four hours weekly.*
- Civilization, Church History, Renaissance. } *Two hours.*
- Reformation, France, England. } *Two hours.*

ECONOMICS. (10 a. m.) *Four hours weekly.*
- Elements of Economics, Applied Economics. } *Two hours.*
- Industrial History, History of Economic Thought. } *Two hours.*

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche, *La Poudre aux Yeux;* Sandeau, *Mlle. de la Seiglière.*
- Short Outline of French Literature (XVII–XIX Centuries).
- Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

Third Year.

POLITICS. (12 m.) *Four hours weekly.*
- English Constitutional Law and History.
- American Constitutional Law and History.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

LABORATORY COURSE. *Four hours class-work weekly.*
- Chemistry (9 a. m.), *or* Physics (10 a. m.), *or* Biology (10 a. m.). } Lectures, recitations, and laboratory work.

ELECTIVE COURSE.* *Two hours weekly.*

* For 1896–97, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Seventh Group. (*Modern Languages.*)

First Year.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*
Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:
Cæsar, *Bellum Civile* (book i).
Quintus Curtius (book iii).
Horace, *Ars Poetica.*
Phædrus (selections).

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

ENGLISH. (1 p. m.) *Four hours weekly.*
Early English Texts.
English Literature.

LABORATORY COURSE. *Four hours class-work weekly.*
Chemistry* (9 a. m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.).
} Lectures, recitations and laboratory work.

Second Year.

GERMAN. (11 a. m.) *Four hours weekly.*
Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* Seidel, *Novellen.*
History of Modern German Literature.
Composition.
Sight Reading.
Private Reading: Lessing, *Emilia Galotti;* Gutzkow, *Zopf und Schwert.*

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
Mediæval History. } *Two hours.*
Modern Europe. }
Elements of Economics. } *Two hours.*
Applied Economics. }

FRENCH. (12 m.) *Four hours weekly.*
Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche, *La Poudre aux Yeux;* Sandeau, *Mlle. de la Seiglière.*
Short Outline of French Literature (XVII–XIX Centuries).
Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports; Private Reading.

ELECTIVE COURSE.† *Three hours weekly.*

Third Year.

A.

FRENCH. (10 a. m.) *Four hours weekly.*
Romantic Movement, especially Hugo and Musset.
Classical Drama, especially Molière.
History of French Literature.
Laws of Versification.
Composition and Idioms.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports; Private Reading.

or C.

ITALIAN *or* SPANISH. (9 a. m.) *Four hours weekly.*

ELECTIVE COURSE.† *Two hours weekly.*

or B.

GERMAN. (10 a. m.) *Four hours weekly.*
Classics: Goethe, *Faust;* Lessing, *Nathan der Weise.*
Prose Reading.
History of German Literature.
Composition.
Sight Reading; Private Reading.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
Logic, Psychology, and Ethics.

ENGLISH. (12 m.) *Four hours weekly.*
Anglo-Saxon.
Early Scottish Poets.
Elizabethan Literature.
Literature of early 19th Century.

*If Chemistry be chosen, it should be taken in the second year, and German in the first year.

†For 1896–97, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

SYNOPSIS OF GROUPS.

Group I.	Group II.	Group III.	Group IV.	Group V.	Group VI.	Group VII.
FIRST YEAR.						
Latin, 9–10. Chemistry, 9–10.* or Biology or Physics, 10–11. Rhetoric, 12–1. Greek, 1–2.	Chemistry, 9–10. German, 11–12. Rhetoric, 12–1. Mathematics, 1–2.	Chemistry, 9–10. Physics, 10–11. German, 11–12. Rhetoric, 12–1.	Chemistry, 9–10. German, 11–12. Rhetoric, 12–1. Mathematics, 1–2.	Latin, 9–10. Chemistry, 9–10.* or Biology or Physics, 10–11. German, 11–12. Rhetoric, 12–1.	Latin, 9–10. History, 10–11. German, 11–12 Rhetoric, 12–1.	Latin, 9–10. Chemistry, 9–10.* or Biology or Physics, 10–11. Rhetoric, 12–1. English, 1–2.
SECOND YEAR.						
Latin, 10–11. German, 11–12. Greek, 12–1. English Literature.	Mathematics, 9–10. Physics, 10–11. French, 12–1. English Literature.	Chemistry, 9–10. Biology, 10–11. French, 12–1. English Literature.	Chemistry, 9–10. Physics, 10–11. French, 12–1. English Literature.	Latin, 10–11. French, 12–1. Mathematics, 1–2. English Literature.	Political Science, 10–11. History, 11–12. French, 12–1. English Literature.	History and Economics, 10–11. German, 11–12. French, 12–1. Elective Course.
THIRD YEAR.						
History and Economics, 10–11. Philosophy, 11–12. French, 12–1. Comp. Philology. Elective Course.	History and Economics, 10–11. Philosophy, 11–12. Physics, 12–1. Elective Course.	Biology, 9–10. History and Economics, 10–11. Philosophy, 11–12. Elective Course.	History and Economics, 10–11. Philosophy, 11–12. Physics, 12–1. Elective Course.	Mathematics, 9–10. History and Economics, 10–11. Philosophy, 11–12. Elective Course.	Chemistry, 9–10. or Physics or Biology, 10–11. Philosophy, 11–12. Political Science, 12–1. Elective Course.	French or German, 10–11. or Italian or Spanish, 9–10. Philosophy, 11–12. English, 12–1. Elective Course.

* See footnotes on pages 162, 166, 168.

A minor course in Geology is offered at 12 m., and may be taken instead of French by those who have passed that subject at matriculation in place of Greek, and, in certain cases, by other persons (see page 150).

HOURS OF COLLEGE COURSES.

Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
9	English Literature. Mathematics (Prelim.).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Italian. Spanish. French (Elements). German (Elements).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Italian. Spanish. French (Elements). German (Elements).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Italian. Spanish.	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Italian. Spanish. French (Elements). German (Elements).
10	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). German (Major). French (Major). Political Science (Minor). Latin (Preliminary).	English Literature. Mathematics (Prelim.).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). German (Major). French (Major). Political Science (Minor). Greek (Preliminary).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). German (Major). French (Major). Political Science (Minor). Greek (Preliminary).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). German (Major). French (Major). Political Science (Minor). Greek (Preliminary).
11	German (Minor). Philosophy. History (Major).	German (Minor). Philosophy. History (Major).	Philosophy. English Literature. Mathematics (Prelim.).	German (Minor). Philosophy. History (Major).	German (Minor). Philosophy. History (Major).
12	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology.	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology.	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology.	Mathematics (Prelim.). Geology.	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Latin (Preliminary).
1	Greek (Minor). Mathematics (Minor). English (Minor).	Greek (Minor). Mathematics (Minor). English (Minor).	Greek (Minor). Mathematics (Minor). English (Minor).	Greek (Minor). Mathematics (Minor). English (Minor). Latin (Preliminary).	

JOHNS HOPKINS MEDICAL SCHOOL.

TERMS OF ADMISSION.

The Medical Department of this University is planned for the professional education of those students who have been especially fitted to receive its instructions by a course of preliminary training in the liberal arts, and especially in those branches of science, like physics, chemistry, and biology, which underlie the medical sciences. Men and women are admitted upon the same terms.

As candidates for the degree of Doctor of Medicine the school receives:

1. Those who have satisfactorily completed the Chemical-Biological course which leads to the A. B. degree in this university.

2. Graduates of approved colleges or scientific schools who can furnish evidence: (*a*) That they have a good reading knowledge of French and German; (*b*) That they have such knowledge of physics, chemistry, and biology as is imparted by the regular minor courses given in these subjects in this university.

Some acquaintance with Latin is also required.

The phrase "a minor course," as employed in this university, means a course that requires a year for its completion. In physics, four class-room exercises and three hours a week in the laboratory are required; in chemistry and biology four class-room exercises and five hours a week in the laboratory in each subject.

Many inquiries have been received regarding the character and amount of the requisite training indicated by the term "Minor Course" in these sciences. In explanation, it may be stated, with respect to Biology, that the candidate should have followed for at least a year a laboratory course in the structure, life history, and vital activities of selected types of animal and vegetable life. In the Chemical-Biological course for undergraduates in this university the laboratory work in biology at present includes the study of such types as amœba, hæmatococcus, yeast, penicillium, bacteria, mushroom, hydra, vorticella, a fern, a flowering plant, the earthworm, lobster, anodon; the gross and minute anatomy of the frog, the development of its eggs, the structure, formation, and metamorphoses of the tadpole; the study

and drawing of the bones of the human skeleton; the comparison of some parts of related vertebrate skeletons; dissection of a mammal; the field and laboratory study of some few flowering plants. The laboratory work is the more important part, the lectures and other exercises subsidiary. It is, of course, not to be understood that this curriculum of biological work must be rigidly followed. Equivalent work will be accepted.

The candidate should have followed a course in general Chemistry for at least a year. This course should include laboratory work, about five hours a week through the year, and lectures and class-room work covering the outlines of inorganic chemistry and the elements of organic chemistry. A good knowledge of the subject as presented in Remsen's "Introduction to the Study of Chemistry" may be regarded as the minimum requirement. A fuller knowledge of Chemistry is, of course, desirable.

In Physics, the candidate should have followed a collegiate course for at least one year. This should include four hours a week of class-room work and at least three hours a week of quantitative work in the laboratory. Special attention should be given to theoretical mechanics and to the mechanical and electrical experiments.

3. Those who give evidence by examination that they possess the general education implied by a degree in arts or in science from an approved college or scientific school, and the knowledge of French, German, physics, chemistry, and biology above indicated.

Applicants for admission will receive blanks to be filled out relating to their previous courses of study.

They are required to furnish certificates from officers of the colleges or scientific schools where they have studied as to the courses pursued in physics, chemistry, and biology. If such certificates are satisfactory, no examination in these subjects will be required.

Candidates who have not received diplomas of the required character will be examined for admission at the beginning of the session.

No one will be admitted to advanced standing without furnishing evidence that these terms of admission as regards preliminary training have been fulfilled, and that courses equivalent in kind and amount to those given here, preceding that year of the course for admission to which application is made, have been satisfactorily completed.

Hearers, not candidates for a degree, will be received at the discretion of the Faculty.

GENERAL PLAN OF INSTRUCTION.

The course of instruction continues through four years. The academic year begins October 1 and closes about the middle of June. There are recesses at Christmas and Easter. Anatomy, (including normal histology and embryology), physiology, and physiological chemistry are the principal studies of the first year. The study of anatomy and of physiology is continued in the second year, and, in addition, pharmacology, general pathology, pathological anatomy, and bacteriology are taken up. During the third year the general principles of medicine, surgery, and obstetrics are studied, and clinical instruction in medicine and surgery is given. During the fourth year the practical study of these subjects is continued in combination with work in the wards of the Hospital, and the various special branches of practical medicine and surgery, such as ophthalmology, dermatology, laryngology, neurology, pædiatrics, are taught. Instruction in hygiene, psychiatry, legal medicine, and medical history will be provided during the course.

Abundant clinical material is afforded by the Johns Hopkins Hospital and Dispensary. The clinical amphitheatre and the clinical laboratories are in the Hospital buildings.

Physiology is taught in the biological laboratory of the University.

The Pathological Laboratory, which for the present accommodates also the department of physiological chemistry, is a four-story building on the grounds of the Hospital. This building contains the autopsy theatre, the pathological museum, and rooms for bacteriology, pathological histology, experimental pathology, physiological chemistry, and special research.

The Women's Fund Memorial Building has been erected during the past year upon a large plot of ground owned by the University near the Hospital. This is a commodious building, three stories in height, constructed for the accommodation of the various anatomical laboratories. The first story of this building is for the present occupied by the department of pharmacology.

In the main building of the Hospital is a good medical library, with full sets of medical periodicals. The various special labora-

tories possess also appropriate libraries. These, as well as the libraries and reading room of the University and those of the Peabody institute, are available without charge for the use of medical students.

Practical work in the dissecting room, in the laboratory, and at the bedside, demonstrations, clinics, lectures, and recitations, form the most prominent features of the methods of instruction.

Detailed statements as to the courses of instruction in the Medical School are given in a separate pamphlet.

FELLOWSHIPS.

I. Fellowships by Courtesy.

The Academic Council may, at their discretion, by special vote, enroll as Fellows by Courtesy

(*a*) Gentlemen who are or who have been teachers in colleges and other like institutions, and who wish, for brief periods, to avail themselves of the opportunities here afforded for study and for the use of books and laboratories.

(*b*) Holders of fellowships in other colleges, during their residence here.

(*c*) Those who have been fellows of this University and desire to continue in residence.

Fellows by Courtesy will not be exempt from the payment of fees, except by a special vote.

II. Fellowships.

Twenty fellowships, each yielding five hundred dollars but not exempting the holder from the charges for tuition, are annually awarded in this University.

The system of fellowships was instituted for the purpose of affording to young men of talent from any place an opportunity of continuing their studies in the Johns Hopkins University

while looking forward to positions as professors, teachers, and investigators, or to other literary and scientific vocations. The fellowships are given to young men who wish to follow systematically through the year the instruction of the teachers here engaged, and those who are appointed are expected to proceed to the degree of Doctor of Philosophy. The appointments are not made as rewards for good work already done, but as aids and incentives to good work in the future; in other words, the fellowships are not so much honors and prizes bestowed for past achievements, as helps to further progress and stepping-stones to honorable intellectual careers. They are not offered to those who are definitely looking forward to the practice of any one of the three learned professions (though such persons are not formerly excluded from the competition), but are bestowed almost exclusively on young men desirous of becoming teachers of science and literature, or proposing to devote their lives to special branches of learning which lie outside of the ordinary studies of the lawyer, the physician, and the minister. Appointments are rarely if ever made of graduates of more than five years' standing.

Each candidate is expected to submit his college diploma or other certificate of proficiency from the institution where he has been taught, with recommendations from those who are qualified to speak of his character and attainments. But this is only introductory. He must also submit, orally or in writing, such evidence of his past success in study and of his plans for the future, together with such examples of his literary or scientific work, as will enable the professors to judge of his fitness for the post. The examination is, indeed, in a certain sense competitive; but not with uniform tests, nor by formal questions submitted to the candidates. First, the head of a given department considers, with such counsel as he may command, the applicant's record. The professors then collectively deliberate on the nominations made by individual members of their body. The list upon which they agree, with the reasons for it, is finally submitted by the President of the University to the Executive Committee, and by them to the Trustees for final registration and appointment. By all these precautions the highest results which were anticipated have been secured. A company of most promising students has been brought

together, and their ability as teachers and scholars has been recognized by the calls they have received to permanent and desirable posts in various parts of the country,

The number of applications for fellowships has hitherto been very large, and it may have happened that some candidates have failed of appointment who were really superior to those selected. But if so, this has resulted from the fact that a considerable number of applicants have each year forwarded to the University merely testimonials from their instructors, without any such examples of their own work as have been mentioned above; and, in consequence, the professors, from want of adequate knowledge, have possibly passed over candidates who may have been in the highest degree meritorious.

The applicants are notified of the result by means of a printed list of the successful candidates.

The absence of candidates from Baltimore has been no bar to their appointment, in cases where adequate evidence of their claims has been presented; but it is obvious, from the nature of the case, that graduate students residing in Baltimore must have better opportunities than others of making known their powers to the appointing board, and during the last few years the number of persons appointed, who had not previously been resident here, is very small.

Regulations.

1. The application must be made prior to May 1, in writing, addressed to the President of the University, and he will refer the papers to the Academic Council, by whom the nominations will be made to the Board of Trustees, at their meeting in June.

2. The candidate must give evidence of a liberal education, such as the diploma of a college of good repute; of decided proclivity towards a special line of study, such as an example of some scientific or literary work already performed; and of upright character, such as a testimonial from some instructor.

3. The value of each fellowship is five hundred dollars. The holder is not exempt from the charges for tuition. In case of resignation, promotion, or removal from the fellowship, payments

will be made for the time during which the office shall have been actually held.

4. Every holder of a fellowship will be expected to perform such duties as may be allotted to him in connection with his course of study, to act when called upon as an examiner or as moderator in the examination-room, to give all his influence for the promotion of scholarship and good order, and in general to co-operate in upholding the efficiency of the University, as circumstances may suggest. He must reside in Baltimore during the academic year.

5. He will be expected to devote his time to the prosecution of special studies (not professional), under the direction of the head of the department to which he belongs, and before the close of the year to give evidence of progress by the preparation of a thesis, the completion of a research, the delivery of a lecture, or by some other method.

6. He may give instruction, with the approval of the President, by lectures or otherwise, to persons connected with the University, but he may not engage in teaching elsewhere.

7. He may be reappointed at the end of the year, but only for exceptional reasons.

8. Usually not more than two fellows will be appointed in any department of study.

9. As these fellowships are awarded as honors, those who are disposed, for the benefit of others, or for any other reason, to waive the pecuniary emolument, may do so, and still have their names retained on the honor list.

III. Adam T. Bruce Fellowship.

This fellowship was founded by the mother of Adam T. Bruce, Ph. D., late Fellow and Instructor in this University, as a memorial of her son, and is awarded annually. It is bestowed by the appointing board upon the candidate whom they consider most likely to promote biological science, and especially animal morphology, by original research. The stipend will be the income of the Adam T. Bruce Fellowship endowment of ten thousand dollars. Preference is given to those who have already held fellowships in the Johns Hopkins University.

The electors consist of the President of the University, the chief instructor in animal morphology, the chief instructor in animal physiology, and a non-resident member annually chosen by the resident electors. The non-resident elector for the year 1895–96 was Professor Maynard M. Metcalf, Ph. D., of the Woman's College of Baltimore.

APPOINTMENTS ALREADY MADE.

1888. Henry V. Wilson, Ph. D.
1889. Shozaburo Watase, Ph. D.
1890. Thomas H. Morgan, Ph. D.
1891. Robert P. Bigelow, Ph. D.
1892. Robert P. Bigelow, Ph. D.
1893. Maynard M. Metcalf, Ph. D.
1894. Ross G. Harrison, Ph. D.
1894. Seitaro Goto, M. S.
1895. Henry McElderry Knower, A. B.
1895. George Lefevre, A. B.

REGULATIONS.

Candidates for the Bruce Fellowship must make application in writing to the President of the Johns Hopkins University before the first of May of the year of their candidature. They must forward to the President, at the same time, such evidence of their qualifications for appointment as they desire to be considered by the electors.

The electors may require any candidate to appear before them in person.

The Bruce Fellow shall devote his time to study and research in Biology at a place approved of by the President of the Johns Hopkins University, and he shall, during the month of February in the year of his tenure of the fellowship, send to the President of the University a written statement of the scientific work accomplished by him since his appointment.

The tenure of the fellowship shall commence on the first of September in the year of appointment.

Two hundred and fifty dollars shall be paid to the Fellow on October 1, and the remainder at convenient intervals during his tenure of the fellowship.

The holder of the Bruce Fellowship shall not be more than thirty years of age at the date of his election.

The Bruce Fellow may be re-elected, but not oftener than twice.

The holder of the Bruce Fellowship shall be exempt from charges for tuition.

The electors shall have the power to declare the fellowship vacant if its holder prove, in their opinion, unworthy; and no further stipend shall be paid to such person.

SCHOLARSHIPS.

1. University Scholarships.

[Regulations revised by the Board of University Studies, May 6, 1891.]

For the encouragement of scholarship among those who have taken the baccalaureate degree and wish to continue their studies here, twenty university scholarships are awarded.

1. Ten of these scholarships are awarded in June, by the Board of Collegiate Advisers, to those young men who have completed their undergraduate course during the current session in this University and who stand first in point of scholarship.

2. The remaining ten, and any of the others made vacant by resignation or otherwise, are open about the first of January to graduates of this or of other institutions who have been studying here during the previous part of the session. Those who wish to be candidates must address their applications to the President of the University, who will appoint a committee of five to consider the applications, and, with the aid of such evidence as may be obtained, to make nominations from among the applicants to the Board of University Studies.

3. The emolument of these scholarships, which are tenable for one year, will be the equivalent of two hundred dollars, part of which will be applied to the payment of tuition fees, while the rest will be paid in money.

4. These scholarships are to be awarded as honors, and those who are disposed, for the benefit of others or for any other reason, to waive the pecuniary emolument, or who are desirous of studying elsewhere, may do so and still have their names retained on the honor list. Those who receive the emolument will be expected to pursue their studies exclusively in this University.

5. The Board will reserve appointments if worthy candidates do not offer.

6. Students who receive honorable mention, without appointment to scholarships, are not entitled to the remission of tuition fees.

II. Hopkins Scholarships.

In the will of the founder of the University, his Trustees are requested to "establish, from time to time, such number of free scholarships in said University as may be judicious, and to distribute the said scholarships among such candidates from the States of Maryland, Virginia, and North Carolina, as may be most deserving of choice, because of their character and intellectual promise, and to educate the young men so chosen free of charge."

Forty-five such scholarships will be bestowed for the next academic year,—upon fifteen students from each of the three States named. These scholarships will be of two grades—the ordinary scholarship, entitling the holder to free tuition, and the honorary scholarship, entitling him to free tuition and a stipend of seventy-five dollars.

Students can be recognized as candidates only when actual residents of the State, from which they desire to be appointed, during at least the year next preceding their enrolment in the University. If the appointing board is not sure as to the legal residence of any candidate, the point in question shall be determined by the Executive Committee of the Board of Trustees.

These scholarships are all bestowed for merit, and are tenable for the year subsequent to the appointment, the holders being re-eligible.

Successful candidates who are disposed, for the benefit of others or for any other reason, to waive the pecuniary emolument, may do so, and still have their names retained on the honor list. The scholarships may be forfeited because of frequent or prolonged absence, defective scholarship, or unworthy conduct.

Scholarships made vacant by resignation, by forfeiture, or by the non-appearance of worthy candidates at the regular times of selection, may be bestowed by the appointing board, at their discretion, upon other candidates who are found worthy, provided that the principles of this foundation are not departed from. In case the holder of a scholarship gives it up for any reason during the course of a session, such part of the stipend will be paid to

him as seems equitable to the Executive Committee of the Board of Trustees.

Holders of scholarships are not exempt from laboratory fees.

Scholars from Maryland.

These scholars are appointed by the Board of Collegiate Advisers, and no one will receive the honor whose standing as a whole is lower than "*good.*"

1. Five of the ordinary scholarships are open to those who have just completed their matriculation examination, and who stand best in a subsequent special examination.

2. Three of the honorary and two of the ordinary scholarships are awarded to those matriculated students whose records in the studies of the first year are most creditable. By "studies of the first year" is meant either the studies laid down for the first year in one of the regular groups, or such other studies, covering fifteen hours of class-room work weekly (exclusive of work done to satisfy matriculation conditions), as may be approved of by the Adviser.

3. Scholarships are awarded for excellence in the studies of the second year upon the same terms as in the case of the first year; provided that the candidate shall have absolved the "studies of the first year" as above defined.

Scholars from North Carolina and Virginia.

Experience has led the authorities to believe that the Hopkins Scholarships allotted to North Carolina and Virginia will be more useful if offered to graduate students rather than to undergraduates. Accordingly, these honors are now awarded like the Fellowships by the Academic Council. Fifteen are open to students from Virginia and fifteen to students from North Carolina who have already received a creditable baccalaureate degree or its equivalent. For each State there are nine ordinary and six honorary scholarships. In case the entire number of scholarships are not required for graduate students, those that remain may be awarded to undergraduates in the order of their merit. Applications in writing should be filed at the President's office, prior to June 1.

III. Washington Scholarships.

The Trustees offer two scholarships, yielding free tuition, to residents of the District of Columbia. These, like the Hopkins Scholarships, are awarded to undergraduate students for merit, do not carry exemption from laboratory fees, and are tenable for one year, the holders being eligible for re-appointment.

IV. Woodyear Scholarships.

These scholarships were founded in 1893 by Mrs. William E. Woodyear, of Baltimore, as a memorial of her husband. They are five in number—of the value of one hundred dollars each,—and are awarded annually for exceptional merit among those who need pecuniary assistance. They are offered primarily to undergraduates.

Charges for Tuition, Laboratory Expenses, etc.

A.

For all Courses except the Medical.

I. *Tuition Fees.*

The charge for tuition is one hundred and fifty dollars per annum, payable at the Treasurer's office in semi-annual instalments, October 1 and February 1. There is no extra charge for instruction in any department of study, for lectures, or for the use of the library, reading-room, and gymnasium. Fees are charged, as below stated, for material consumed in the laboratories, for registration, and for diplomas.

No deduction is made at the Treasurer's office because of absence for a period of less than half a year, or because a student gives only a part of his time to study, or because he belongs to but one class.

II. *Registration Fee and Caution Money.*

Every student (including Fellows, Fellows by Courtesy, workers in the laboratories, and attendants upon lectures) pays a registration fee of five dollars and deposits ten dollars as caution money at the time of his enrolment. The caution money is repaid to the student when he leaves the university, if there are no charges against him.

III. *Fees for Attendants on Single Courses.*

Students engaged in other pursuits — clergymen, lawyers, teachers, and other such persons — *who are not candidates for a degree,* are allowed to follow certain courses, not exceeding five lectures weekly, on the payment of fifty dollars at one time. They are not regarded as members of the University, but are enrolled as "attendants upon lectures," and are entitled only to such privileges as they have paid for. Persons who desire to be so enrolled, are required to make a special written application to the Registrar.

IV. *Graduation Fees.*

The graduation fees are as follows, payable before the delivery of diplomas:

Doctor of Philosophy, ...	$10.00
Bachelor of Arts, ...	5.00

For a certificate of proficiency issued by authority of an examining board and under the seal of the University, the fee is ten dollars.

V. *Laboratory Charges.*

In Chemistry: For undergraduates and for graduates who take Chemistry as a subordinate subject, twenty-four dollars, or twelve dollars for a half-year; for graduates and special students following Chemistry as their principal subject, thirty-six dollars, or eighteen dollars for a half-year.

In Physics: For students who work one afternoon a week, twelve dollars a year; for those who work two afternoons a week, twenty-four dollars a year; for those who take Physics as their principal subject and for second-year students in applied electricity, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In Biology: For undergraduates and for graduates who take Zoölogy or Physiology as a subordinate subject, twenty-four dollars, or twelve dollars for a half-year; for graduates and special students following a biological science as their principal subject, thirty-six dollars, or eighteen dollars for a half-year.

In all the laboratories, a charge is made for breakage and for apparatus not returned in good condition.

Exception to these charges can only be made at the written request of the Director of a laboratory, approved by the President of the University.

Fellows by Courtesy and others who have the privileges of guests in the various laboratories, are expected to pay the usual laboratory charges.

Doctors of Philosophy of this University who desire to remain for a time in the University after having received their diplomas, may do so without charge for tuition, but they are required to pay the usual laboratory charges.

B.

I. Candidates for the Degree of M. D.

The charge for tuition is two hundred dollars per annum, payable at the Treasurer's office in semi-annual instalments, October 1 and February 1. There are no extra charges for instruction in any department or for laboratory courses, except for materials consumed.

A deposit of ten dollars as caution money is required from each student at the time of his enrolment. The caution money is repaid to the student when he leaves, if there are no charges against him. Special charges are made for breakage and for damage to apparatus.

II. Graduates attending Special Courses in Medicine.

Graduates of Medical Colleges are admitted to clinical courses in Medicine, Surgery, and Gynecology for the sum of $100, and to single courses on payment of the fees specified below:

Medicine,	$50
Surgery,	50
Gynecology,	50

Extras.

Pathological Histology (including clinical microscopy, post-mortem examinations, and pathological demonstrations),	25
Bacteriology,	25
Advanced and special work,	25

In the Pathological Laboratory special charges are made for breakage and for damage to apparatus. A deposit of ten dollars as caution money is required, which is returned when the student leaves, if there are no charges against him.

Before entering upon any course of instruction in the Medical School, the student must obtain from the Dean of the Medical School, or from his representative, a card certifying that the applicant is qualified to follow the desired course. This card must be presented at the Treasurer's office, where the fees must be paid before permission is granted to attend the lectures.

Graduates in Medicine are admitted to lectures and clinics in the amphitheatre without charge.

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M. E., Cornell University, 1893. 828 E. Lafayette Av.

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M. D., University of Maryland, 1881.

THOMAS C. GILCHRIST, M. B., *Associate in Dermatology.*
M. B., University of London, 1886; M. R. C. S., London. 820 E. Preston St.

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A. B., Johns Hopkins University, 1888, Fellow, 1890-91, and Ph. D., 1891. Washington.

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Ph. D., University of Jena, 1891, and Assistant in Chemistry, 1891-92. 1601 Madison Av.

S. EDWIN WHITEMAN, *Instructor in Drawing.* Mt. Washington.
École des Beaux-Arts, Paris.

J. ELLIOTT GILPIN, PH. D., *Instructor in Chemistry.* 341 Dolphin St.
A. B., Johns Hopkins University, 1889, and Ph. D., 1892.

J. BASCOM CRENSHAW, PH. D., *Instructor in Physical Training.*
A. M., Randolph-Macon College, 1891; Ph. D., Johns Hopkins University, 1898.
602 N. Howard St.

JOHN R. SCOTT, A. M., *Instructor in Vocal Culture.* 2728 Parkwood Av.
A. B., Ohio University, 1864, and A. M., 1867; Instructor, Washington University, St. Louis, 1877-88.

MELVIN BRANDOW, A. B., *Assistant Librarian.* 1709 McCulloh St.
A. B., Rutgers College, 1888; Fellow, Johns Hopkins University, 1892-93.

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1218 W. Lexington St.

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M. D., College of Physicians and Surgeons (Balt.), 1893. 1009 N. Caroline St.

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A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1894.

THOMAS S. BAKER, PH. D., *Instructor in German.* 1202 Mt. Royal Av.
A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1895.

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GEORGE C. KEIDEL, PH. D., *Assistant in Romance Languages.*
A. B., Johns Hopkins University, 1889, Fellow, 1893-95, and Ph. D., 1895. Catonsville.

CHARLES P. SIGERFOOS, S. B., *Assistant in Zoölogy and Embryology.*
S. B., Ohio State University, 1889. 1217 McCulloh St.

HARRY L. WILSON, PH. D., *Instructor in Latin.* 226 W. Lanvale St.
A. B., Queen's University (Ont.), 1887, and A. M., 1888; Fellow, Johns Hopkins University, 1895, and Ph. D., 1896.

JOSEPH C. BLOODGOOD, M. D., *Instructor in Surgery.*
S. B., University of Wisconsin, 1888; M. D., University of Pennsylvania, 1891.
Johns Hopkins Hospital.

ADOLPH G. HOEN, M. D., *Instructor in Photo-Micrography.*
M. D., University of Maryland, 1872. 718 York Road.

THOMAS S. CULLEN, M. B., *Instructor in Gynecology.*
M. B., University of Toronto, 1890. Johns Hopkins Hospital.

GEORGE W. DOBBIN, M. D., *Assistant Demonstrator of Obstetrics.*
A. B., Johns Hopkins University, 1891; M. D., University of Maryland, 1894.
Johns Hopkins Hospital.

THOMAS B. FUTCHER, M. B., *Instructor in Medicine.*
M. B., University of Toronto, 1893. Johns Hopkins Hospital.

FRANK R. SMITH, M. D., *Instructor in Medicine.* 4 W. Read St.
M. D., University of Maryland, 1891.

WILLIAM J. A. BLISS, PH. D., *Assistant in Physics.* 912 St. Paul St.
A. B., Harvard University, 1888; Ph. D., Johns Hopkins University, 1894.

RUFUS M. BAGG, PH. D., *Assistant in Geology.* 1108 Harlem Av.
A. B., Amherst College, 1891; Ph. D., Johns Hopkins University 1895.

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A. B., Johns Hopkins University, 1894, and Ph. D., 1895.

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WALTER JONES, PH. D., *Assistant in Physiological Chemistry.*
A. B., Johns Hopkins University, 1888, and Ph. D., 1891. 1811 Maryland Av.

HENRY L. MOORE, PH. D., *Instructor in Economics.* Waverly.
A. B., Randolph-Macon College, 1892; Fellow, Johns Hopkins University, 1895-96, and Ph. D., 1896.

ROSS G. HARRISON, PH. D., *Instructor in Anatomy.* 2018 Park Av.
A. B., Johns Hopkins University, 1889, Fellow, 1893-94, and Ph. D., 1894; Lecturer, Bryn Mawr College, 1894-95.

LOUIS E. LIVINGOOD, M. D., *Assistant in Pathology.*
A. B., Princeton University, 1890; M. D., University of Pennsylvania, 1895; Fellow, Johns Hopkins University, 1895-96. Johns Hopkins Hospital.

CHARLES L. REESE, PH. D., *Assistant in Chemistry.* 1801 Linden Av.
Ph. D., University of Heidelberg, 1886.

LECTURERS, 1896-97.

On the Turnbull Foundation.

M. FERDINAND BRUNETIÈRE, of Paris, Lecturer in the École Normale Supérieure.
Nine lectures on *French Poetry.*

On the Levering Foundation.

Rev. LYMAN ABBOTT, D. D., of Brooklyn, N. Y.
Three lectures on *The Christian in the Commonwealth.*

On the Williams Foundation.

Sir ARCHIBALD GEIKIE, LL. D., F. R. S., Director General of the Geological Survey of Great Britain and Ireland.
Six lectures on the *Principles of Geology* (before students of geology), with one public lecture.

Lecturers before different departments of the University.

History and Politics.

Professor ELGIN R. L. GOULD, PH. D., of New York.
Twenty-five lectures on *Modern Municipal Problems.*

Professor JAMES SCHOULER, LL. D., of Boston University. Author of "History of the United States under the Constitution."
Twenty-five lectures on the *Principles of Common Law.*

Professor WOODROW WILSON, PH. D., LL. D., of Princeton University.
Twenty-five lectures on *Comparative Politics.*

Botany.

BOLLING W. BARTON, M. D., of Baltimore.

JAMES E. HUMPHREY, S. D., of Baltimore.

Geology.

BAILEY WILLIS, C. E., M. E., of the U. S. Geological Survey.
Twenty-five lectures on *Stratigraphic and Structural Geology.*

Romance Languages.

Professor FREDERICK M. WARREN, PH. D., of Adelbert College.
Forty lectures on *French Literature.*

Medical School.

JOHN S. BILLINGS, M. D., LL. D., Surgeon, U. S. Army, and late Librarian of the Surgeon-General's Office; Superintendent of the New York Public Library.

CH. WARDELL STILES, PH. D., Zoologist of the Bureau of Animal Industry, U. S. Department of Agriculture.

Additional Assistants for the Current Year.

The following names are those of students who render more or less service to the University in the departments named. In the enumeration, as in former years, such persons are not counted as members of the academic staff:

F. BONNOTTE, PH. D., *French Conversation.*
B. B. BRACKETT, A. M., *Electricity.*
C. B. FURST, PH. B., *Y. M. C. A.*
J. C. HARTZELL, M. S., *Geology.*
J. HOFMANN, *German Conversation.*
W. J. HUMPHREYS, C. E., *Physics.*
G. C. LEE, A. B., *Political Science.*
E. O. LOVETT, PH. D., *Mathematics.*
E. W. MAGRUDER, A. B., *Chemistry.*
J. M. MCBRYDE, A. M., *English Composition.*
S. A. MITCHELL, A. M., *Astronomy.*
J. A. NESS, A. M., *Sanskrit.*
C. C. O'HARRA, A. B., *Geology.*
C. W. PRETTYMAN, A. B., *German.*
C. L. REEDER, *Physics.*
E. RHOADS, S. B., *Physics.*
W. ROSENAU, A. B., *Hebrew.*
M. T. SUDLER, S. B., *Biology.*
H. P. THIEME, A. B., *French Literature.*
C. W. WAIDNER, A. B., *Physics.*
W. H. WILHELM, S. B., *Astronomy.*

GRADUATE STUDENTS.

FELLOWS BY COURTESY.

HENRY HAROLD BALLARD. Baltimore. 855 *Park Av.*

A. B., Johns Hopkins University, 1888, and Ph. D., 1893; Instructor in Chemistry, Rose Polytechnic Institute, 1893-96. *Chemistry.*

GEORGE MELVILLE BOLLING. Baltimore. *Washington, D. C.*

A. B., Loyola College, 1891; Fellow, Johns Hopkins University, 1893-94, and Ph. D., 1896; Instructor in Sanskrit, Catholic University. *Sanskrit.*

FRANK HOLLINGER CLUTZ. Atchison, Kan. 1019 *Linden Av.*

A. B., Midland College, 1892; Fellow, Johns Hopkins University, 1894-96. *Astronomy, Physics, and Mathematics.*

FRANKLIN STORY CONANT. Wellesley Hills, Mass. 234 *W. Lanvale St.*

A. B., Williams College, 1893; Fellow, Johns Hopkins University, 1895-96. *Zoology, Physiology, and Botany.*

WILLIAM ALEXANDER ECKELS. Carlisle, Pa. 210 *McMechen St.*

A. B., Dickinson College, 1883, and A. M., 1886; late Professor in Ripon College. *Greek, Latin, and English.*

WILLIAM RITCHIE FRASER. Pictou, N. S. 837 *N. Eutaw St.*

A. B., Dalhousie University, 1882; Associate Professor, University of Nebraska, 1892-96. *Greek, Historical Jurisprudence, and Latin.*

CHARLES JAQUES GOODWIN. Farmington, Me. 925 *Madison Av.*

A. B., Bowdoin College, 1887; Fellow, Johns Hopkins University, 1889-90, and Ph. D., 1890. *Greek and German.*

SAMUEL VERPLANCK HOFFMAN. New York City. 1009 *N. Calvert St.*

M. E., Stevens Institute of Technology, 1888; Fellow, Johns Hopkins University, 1893-94. *Astronomy, Physics, and Chemistry.*

WILLIAM JACKSON HUMPHREYS. University of Va. 1214 *Eutaw Place.*

A. B., Washington and Lee University, 1886, and C. E., 1888; Fellow, Johns Hopkins University, 1895-96. *Physics, Chemistry, and Mathematics.*

CHARLES WILLIAM LEVERETT JOHNSON. Baltimore. 32 *E. Preston St.*

A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1896. *Greek.*

GEORGE THEOPHILUS KEMP. Baltimore. 718 *N. Howard St.*

A. B., Johns Hopkins University, 1883, Fellow, 1885-86, and Ph. D., 1886; M. D., Long Island Medical College, 1891. *Physiology.*

FRANCIS PLAISTED KING. Portland, Me. 2134 *Bolton St.*

A. B., Colby University, 1890; Fellow, Johns Hopkins University, 1892-93. *Geology.*

EDGAR ODELL LOVETT. Baltimore. 1214 *Eutaw Place.*

A. B., Bethany College (W. Va.), 1890, S. B., and A. M., 1894; A. M. and Ph. D., University of Virginia, 1895; Ph. D., University of Leipsic, 1896. *Mathematics.*

JOHN MCLAREN MCBRYDE, JR. Blacksburg, Va. 1214 *Eutaw Place.*

A. B., University of South Carolina, 1890, and A. M., 1893; Fellow, Johns Hopkins University, 1895-96. *English, German, and History.*

JOHN FREDERICK MOHLER. Carlisle, Pa. *Carlisle, Pa.*

A. B., Dickinson College, 1887; Fellow, Johns Hopkins University, 1896; Professor of Physics, Dickinson College. *Physics, Astronomy, and Mathematics.*

CHARLES WILLIAM PEPPLER. Baltimore. 2662 *Pennsylvania Av.*

A. B., Johns Hopkins University, 1892, and Fellow, 1895-96. *Greek, Latin, and Sanskrit.*

WILLIAM TAYLOR THOM. Ashton. 2428 *Eutaw Place.*

A. B., Washington and Lee University, 1869, A. M., 1870, and D. L., 1889. *History and English.*

FREDERICK HENRY WILKENS. Baltimore. *The Albion.*

A. B., Johns Hopkins University, 1894; Ph. D., University of Leipsic, 1891; late Assistant Professor, University of Wisconsin. *German.*

Adam T. Bruce Fellow.

George Lefevre. Baltimore. 1225 *Linden Av.*
A. B., Johns Hopkins University, 1891, and Fellow, 1894–95. *Zoology, Physiology, and Botany.*

Fellows.

Edward Cooke Armstrong. Front Royal, Va. 1213 *John St.*
A. B., Randolph-Macon College, 1890, and A. M., 1894. *Romance Languages.*

James Morton Callahan. Mitchell, Ind. 120 *W. Twentieth St.*
A. B., Indiana University, 1894, and A. M., 1895. *History, Jurisprudence, and Politics.*

Edward Perkins Carter. Williamstown, Mass. 9 *W. Chase St.*
M. D., University of Pennsylvania, 1894. *Pathology.*

Hubert Lyman Clark. Baltimore. 906 *McCulloh St.*
A. B., Amherst College, 1892. *Zoology, Physiology, and Botany.*

Noah Ernest Dorsey. Annapolis Junction. *Annapolis Junction.*
A. B., Johns Hopkins University, 1893. *Physics, Mathematics, and Chemistry.*

Pelham Edgar. Toronto, Ont. 2322 *Linden Av.*
A. B., University of Toronto, 1892. *English, German, and French.*

Edwin Luther Green. Richmond, Va. 622 *Dolphin St.*
A. B., Washington and Lee University, 1892. *Greek, Latin, and Sanskrit.*

Arthur Sewall Haggett. New Castle, Me. 1307 *Linden Av.*
A. B., Bowdoin College, 1893, and A. M., 1894. *Greek, Latin, and Sanskrit.*

William Edwards Henderson. Wooster, O. 837 *N. Eutaw St.*
A. B., University of Wooster, 1891. *Chemistry, Physics, and Mathematics.*

Charles Hoeing. Lexington, Ky. *Rome, Italy.*
A. B., Kentucky State College, 1890, and A. M., 1892. *Latin, Greek, and Sanskrit.*

Duncan Starr Johnson. Cromwell, Conn. 930 *Madison Av.*
S. B., Wesleyan University (Conn.), 1892. *Botany, Zoology, and Physiology.*

Paul Henry Land. Baltimore. 715 *N. Howard St.*
A. B., Calvin College (O.), 1890. *Semitic Languages.*

Omera Floyd Long. Millersburg, Ky. 1307 *Linden Av.*
A. B., Kentucky Wesleyan College, 1890, and A. M., 1893. *Latin, Greek, and Sanskrit.*

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A. B., Amherst College, 1886, and A. M., 1891. *Physics, Chemistry, and Mathematics.*

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A. B., Luther College, 1884, and A. M., 1890. *Sanskrit, Greek, and Latin.*

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St. Petersburg Artillery School. *Mathematics, Astronomy, and English Literature.*

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A. B., Randolph-Macon College, 1889, and A. M., 1890. *Chemistry, Geology, and Physics.*

FRANK ROY RUTTER. Baltimore. 1406 *Myrtle Av.*
A. B., Johns Hopkins University, 1894. *Economics, History, and Jurisprudence.*

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S. B., Amherst College, 1892. *Geology, Mineralogy, and Biology.*
(20)

UNIVERSITY SCHOLARS.

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A. B., Harvard University, 1894. *Geology.*

THOMAS SEWELL ADAMS. Baltimore. 1405 *Hollins St.*
A. B., Johns Hopkins University, 1896. *Economics and History.*

CHARLES EDWARD CASPARI. Baltimore. 1129 *Harlem Av.*
A. B., Johns Hopkins University, 1896. *Chemistry.*

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A. B., Johns Hopkins University, 1896. *Romance Languages.*

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S. B., Iowa State University, 1890. *Zoology, Physiology, and Botany.*

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A. B., Leland Stanford Jr. University, 1892, and A. M., 1893. *Biology.*

KARL JOSEF GRIMM. Baltimore. 429 *N. Gilmor St.*
Tauberbischofsheim Gymnasium. *Semitic Languages.*

JAMES GRAHAM HARDY. Easton, Pa. 1504 *McCulloh St.*
A. B., Lafayette College, 1894. *Physics, Mathematics, and Chemistry.*

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A. B., University of Alabama, 1887, LL. B., 1888, and A. M., 1889. *Latin, Greek, and Sanskrit.*

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A. B., Johns Hopkins University, 1896. *History and Economics.*

ST. GEORGE LEAKIN SIOUSSAT. Lake Roland. *Lake Roland.*
A. B., Johns Hopkins University, 1896. *History and Economics.*

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A. B., Johns Hopkins University, 1896. *Semitic Languages.*

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PHILOSOPHICAL STUDENTS.

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S. B., Pennsylvania College, 1893. *Chemistry, Mineralogy, and Physics.*

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HENRY LEE ARNOLD. Corvallis, Ore. 853 *N. Eutaw St.*
S. B., Oregon Agricultural College, 1890. *English.*

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S. B., St. Lawrence University, 1894. *Chemistry and Physics.*

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A. B., Johns Hopkins University, 1894. *Romance Languages.*

CORNELIUS BEATTY. Baltimore. 2718 *St. Paul St.*
A. B., Johns Hopkins University, 1896. *Biology.*

ERNEST JULIUS BECKER. Baltimore. 2131 *Maryland Av.*
A. B., Johns Hopkins University, 1894. *English, German, and French.*

WILLIAM GORDON BELSER. Summerton, S. C. 1110 *Druid Hill Av.*
A. B., South Carolina College, 1895. *English.*

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A. B., German Wallace College, 1891; Ph. B., Baldwin University, 1894. *Zoology, Physiology, and Botany.*

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S. B., St. John's College, 1896. *Chemistry, Geology, and Physics.*

ARTHUR BIBBINS. Baltimore. 333 *N. Charles St.*
Ph. B., Albion College, 1887. *Geology.*

FERDINAND BONNOTTE. Baltimore. 43 *W. Preston St.*
Ph. D., Johns Hopkins University, 1896. *Romance Languages.*

JOHN ROBERT BOSLEY. Baltimore. 1607 *Park Av.*
A. B., Western Maryland College, 1896. *Biology, Chemistry, and Physics.*

JOSEPH HOCKMAN BOWMAN. Woodstock, Va. 310 *W. Hoffman St.*
A. B., Franklin and Marshall College, 1893, and A. M., 1896. *Physics, Electricity, and Mathematics.*

BYRON BRIGGS BRACKETT. Hannibal, N. Y. 916 *McCulloh St.*
A. B., Syracuse University, 1890, and A. M., 1893. *Physics, Electricity, and Mathematics.*

C. W. EMIL MILLER, PH. D., *Associate in Greek.* Sherwood.
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BERT J. VOS, PH. D., *Associate in German.* 2118 St. Paul St.
A. B., University of Michigan, 1888; Fellow, Johns Hopkins University, 1889-91, and Ph. D., 1892; Instructor in the University of Chicago, 1892-96.

JOHN M. T. FINNEY, M. D., *Associate in Surgery.* 923 N. Charles St.
A. B., Princeton University, 1884; M. D., Harvard University, 1888.

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A. B., St. John's College, 1884; Ph. D., Johns Hopkins University, 1890.
2208 Maryland Av.

CHRISTOPHER JOHNSTON, JR., PH. D., *Associate in the Semitic Languages.* 5 W. Chase St.
B. Litt., University of Virginia, 1876, A. B., 1878, and A. M., 1879; M. D., University of Maryland, 1880; Fellow, Johns Hopkins University, 1889-91, and Ph. D., 1894.

LORRAIN S. HULBURT, PH. D., *Associate in Mathematics.*
A. B., University of Wisconsin, 1883, and A. M., 1888; Professor of Mathematics, University of South Dakota, 1887-91; Fellow, Clark University, 1891-92; Ph. D., Johns Hopkins University, 1894. 2437 N. Calvert St.

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HERBERT G. GEER, M. E., *Associate in Mechanical Engineering.*
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EDWARD B. MATHEWS, PH. D., *Associate in Mineralogy.*
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WILLIAM W. RUSSELL, M. D., *Associate in Gynecology.*
M. D., University of Pennsylvania, 1890. Johns Hopkins Hospital.

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M. D., University of Maryland, 1881.

THOMAS C. GILCHRIST, M. B., *Associate in Dermatology.*
M. B., University of London, 1886; M. R. C. S., London. 820 E. Preston St.

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A. B., Johns Hopkins University, 1884; M. D., University of Pennsylvania, 1887.

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M. D., University of Maryland, 1884. 211 W. Madison St.

FONGER DEHAAN, PH. D., *Associate in Romance Languages.*
Fellow, Johns Hopkins University, 1894, and Ph. D., 1895; Instructor, Lehigh University, 1895-97. 929 McCulloh St.

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A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1894.
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HARRY EGERTON FORD. Norwood, Ont. 227 *W. Lafayette Av.*
A. B., University of Toronto, 1895. *Romance Languages.*

SAMUEL EAGLE FORMAN. Baltimore. 1434 *McCulloh St.*
A. B., Dickinson College, 1887; Ph. D., Johns Hopkins University, 1897. *History, Jurisprudence, and Economics.*

WILLIAM LINWOOD FOUSHEE. Roxboro, N. C. 1424 *Druid Hill Av.*
A. M., Wake Forest College, 1894. *Greek, Latin, and Sanskrit.*

GEORGE STRONACH FRAPS. Raleigh, N. C. 1424 *Druid Hill Av.*
A. B., North Carolina Agricultural College, 1896. *Chemistry and Physics.*

FRANK PRICE FREIN. Gt. Barrington, Mass. 520 *W. Mulberry St.*
A. B., Williams College, 1892. *Romance Languages.*

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Ph. B., Dickinson College, 1893, and A. M., 1896. *English, German, and Philosophy.*

WIGHTMAN WELLS GARNER, Darlington, S. C. 527 *N. Howard St.*
A. B., South Carolina College, 1896. *Chemistry.*

JOHN BAPTISTE GHIO. St. Louis, Mo. 914 *McCulloh St.*
A. B., Christian Brothers College of St. Louis, 1896. *Biology, Chemistry, and Physics.*

WILLIAM FRANCIS GILL. Henderson, N. C. 1414 *Madison Av.*
A. B., Trinity College (N. C.), 1894. *Latin, Greek, and Roman Law.*

LEONIDAS CHALMERS GLENN. Crowder's Creek, N. C. 411 *W. Hoffman St.*
A. B., University of South Carolina, 1891. *Geology, Palæontology, and Biology.*

CASWELL GRAVE. Monrovia, Ind. 1125 *Argyle Av.*
S. B., Earlham College, 1895. *Zoology.*

NATHANIEL EDWARD GRIFFIN. Baltimore. 1027 *N. Calvert St.*
A. B., Johns Hopkins University, 1894. *English, German, and Philosophy.*

HERBERT EUGENE GRIFFITH. Moline, Ill. 113 *E. Monument St.*
S. B., Northwestern University, 1893. *Chemistry.*

REV. ADOLPH GUTTMACHER. Baltimore. 1833 *Linden Av.*
A. B., University of Cincinnati, 1887. *Semitic Languages.*

RICHARD CAMERON HALDEMAN. Harrisburg, Pa. 718 *N. Howard St.*
A. B., Yale University, 1896. *Electricity.*

HOLLISTER ADELBERT HAMILTON. Rochester, N. Y. 1105 *Druid Hill Av.*
A. B., University of Rochester, 1892. *Greek, Latin, and Sanskrit.*

LOUIS VIRGIL HAMMAN. Baltimore. 2500 *Madison Av.*
A. B., Rock Hill College, 1895. *Biology, Chemistry, and Physics.*

CALEB NOTBOHM HARRISON. Milwaukee, Wis. 914 *N. Fulton Av.*
B. C. E., University of Wisconsin, 1882. *Physics, Astronomy, and Mathematics.*

JOSEPH CULVER HARTZELL. Orangeburg, S. C. 2101 *St. Paul St.*
S. B., U. S. Grant University (Tenn.), 1892, and M. S., 1895. *Biology and Geology.*

REV. JULIUS HOFMANN. Baltimore. 915 *Harlem Av.*
University of Giessen. *German and French.*

CHARLES COLLIER HOLDEN. Raleigh, N. C. 347 *N. Charles St.*
A. B., Johns Hopkins University, 1888. *Romance Languages.*

JOSEPH THOMAS HORNER. Allegheny, Pa. 1122 *Druid Hill Av.*
E. E., Western University of Pennsylvania, 1896. *Mathematics and Physics.*

SAMUEL FRANCIS HOWARD. Wilbraham, Mass. 1122 *Druid Hill Av.*
S. B., Massachusetts Agricultural College, 1894. *Chemistry.*

JULIAN HUGUENIN. Charleston, S. C. 1219 *Madison Av.*
A. B., Charleston College, 1895. *English, German, and French.*

THOMAS MADISON JONES. Doe Hill, Va. 622 *Dolphin St.*
A. B., Randolph-Macon College, 1894. *Latin, Greek, and German.*

WILLIAM APP JONES. Hillsboro, N. C. 1204 *McCulloh St.*
A. B., Wake Forest College, 1893. *Chemistry, Geology, and Mineralogy.*

PERCY LEWIS KAYE. Iowa City, Iowa. 1123 *Linden Av.*
A. B., Iowa State University, 1895, and A. M., 1896. *History and Politics.*

EDWIN WEXLER KENNEDY. Durham, N. C. 2315 *N. Charles St.*
A. B., University of Tennessee, 1880. *History, Jurisprudence, and Politics.*

JAMES WILLIAM KERN. Alexandria, Va. 311 *W. Lanvale St.*
University of Virginia, 1881. *Greek, Sanskrit, and Latin.*

STEPHEN HENRY KING. Baltimore. 1529 *Bolton St.*
M. D., Harvard University, 1872. *Chemistry and Physics.*

SAMUEL SHIPMAN KINGSBURY. Pittsburg, Pa. 1404 *Madison Av.*
A. B., Marietta College, 1893, and A. M., 1896. *Greek, Latin, and Sanskrit.*

JOHN WILLIAM LAWSON. Damascus. 1416 *Linden Av.*
S. B., Maryland Agricultural College, 1893. *Chemistry, Physics, and Mathematics.*

GUY CARLETON LEE. Chapel Hill, N. C. 1021 *Cathedral St.*
LL. B., University of North Carolina, 1894; A. B. and LL. M., Dickinson College, 1895. *History and Politics.*

SETH HANCE LINTHICUM. Wellham's. *Wellham's.*
S. B., St John's College, 1895. *Chemistry, Mineralogy, and Geology.*

WILLIAM HARVEY MADDREN. Brooklyn, N. Y. 1219 *Madison Av.*
S. B., Brooklyn Polytechnic Institute, 1896. *Biology and Chemistry.*

EGBERT WATSON MAGRUDER. Charlottesville, Va. 238 *W. Hoffman St.*
A. B., Hampden-Sidney College, 1891. *Chemistry, Mineralogy, and Physics.*

REV. JOHN DAMEN MAGUIRE. Washington, D. C. *St. Joseph's Seminary.*
A. B., La Salle College, 1886; S. T. B., Catholic University, 1891, and S. T. L., 1892. *Latin and Greek.*

FRANCIS MALLORY. Tappahannock, Va. 1424 *Druid Hill Av.*
C. E., Virginia Military Institute, 1889. *Physics, Mathematics, and Astronomy.*

RICHARD ELLIOTT MARINE. Baltimore. 2514 *Madison Av.*
A. B., Johns Hopkins University, 1896. *Physics and Mathematics.*

LOUIS WILSON MATTERN. Warrior's Mark, Pa. 1122 *Druid Hill Av.*
S. B., Pennsylvania State College, 1894. *Chemistry.*

REV. WHITFORD LOANE MCDOWELL. Baltimore.
A. B., Johns Hopkins University, 1891. *Semitic Languages.*

THOMAS GILBERT MCFADDEN. Dayton, O. 1214 *Madison Av.*
A. B., Otterbein University, 1894. *Chemistry and Physics.*

EDWARD PATRICK MCKEOUGH. Hartford, Conn. 335 *St. Paul St.*
S. B. and A. B., Villanova College (Pa.), 1896. *Biology, Chemistry, and Physics.*

ANDREW CYRUS MCLAUGHLIN. Austin, Texas. 1019 *Linden Av.*
S. B., University of Texas, 1896. *Geology and Chemistry.*

JOSEPH FRANCIS MERRILL. Richmond, Utah. 315 *W. Hoffman St.*
S. B., University of Michigan, 1898. *Physics and Electricity.*

ALFRED WILLIAM MILDEN. Cornwall, Ont. 226 *W. Lanvale St.*
A. B., University of Toronto, 1888. *Greek, Latin, and Sanskrit.*

SAMUEL ALFRED MITCHELL. Kingston, Ont. 1404 *Madison Av.*
A. M., Queen's University (Ont.), 1891. *Astronomy, Physics, and Mathematics.*

GEORGE WEBBER MIXTER. New Haven, Conn. 517 *Cathedral St.*
Ph. B., Yale University, 1895. *Physics.*

WALTER ALEX. MONTGOMERY, JR. Warrenton, N. C. 309 *W. Hoffman St.*
A. B., Johns Hopkins University, 1892. *Greek and Latin.*

CLARENCE LEANDER MOORE. Salisbury, N. B. 1103 *Linden Av.*
A. B., Dalhousie University, 1891. *Biology.*

DANIEL ESTON MOTLEY. Chatham, Va. 725 *Harlem Av.*
A. B., Milligan College (Tenn.), 1894. *History, Economics, and Philosophy.*

WILLIAM ANTHONY MULHERIN. Augusta, Ga. 105 *W. Franklin St.*
A. B., St. Joseph's College (Ala.), 1891. *Biology.*

ROKURO NAKASEKO. Kyoto, Japan. 616 *N. Carey St.*
Doshisha University, 1889. *Chemistry.*

CHARLES PATRICK NEILL. Austin, Texas. 1223 *Druid Hill Av.*
A. B., Georgetown College (D. C.), 1891; A. M., Notre Dame University, 1893. *Economics, Jurisprudence, and History.*

HARVEY NEWCOMER. Rohrerstown, Pa. 310 *W. Hoffman St.*
A. B., Franklin and Marshall College, 1892, and A. M., 1895. *Physics.*

WILLIAM ALBERT NITZE. Baltimore. 1505 *Edmondson Av.*
A. B., Johns Hopkins University, 1894. *Romance Languages.*

CLEOPHAS CISNEY O'HARRA. Carthage, Ill. 1841 *W. Lexington St.*
A. B., Carthage College, 1891. *Geology and Biology.*

D'ARCY PAUL PARHAM. Hampton, Va. 1019 *Linden Av.*
A. M., Randolph-Macon College, 1891. *English, German, and History.*

NATHAN ALLEN PATTILLO. Loachapoka, Ala. 1211 *Madison Av.*
S. B., Southern University, 1887, and A. M., 1890. *Mathematics and Physics.*

THOMAS DOBBIN PENNIMAN. Baltimore. 922 *Cathedral St.*
A. B., Johns Hopkins University, 1892. *Physics, Electricity, and Mathematics.*

DAVID STERRETT PINDELL. Cockeysville. *Cockeysville.*
A. B., Johns Hopkins University, 1895. *Electricity.*

JOHN EUGENE HOWARD POST. Baltimore. 209 *W. Monument St.*
A. B., Johns Hopkins University, 1894. *Romance Languages.*

CHARLES LEONARD REEDER. Baltimore. 1716 *Druid Hill Av.*
Proficient in Applied Electricity (J. H. U.), 1896. *Physics.*

EBENEZER EMMET REID. Lynnhaven, Va. 1133 *Bolton St.*
A. M., Richmond College, 1892. *Chemistry, Physics, and Mathematics.*

EDWARD RHOADS. Germantown, Pa. 906 *McCulloh St.*
S. B., Haverford College, 1893. *Physics, Chemistry, and Mathematics.*

ROY SPENCER RICHARDSON. Syracuse, N. Y. 1033 *McCulloh St.*
Ph. B., Syracuse University, 1894. *Zoology, Physiology, and Botany.*

HAROLD CHASE RIDGELY. Annapolis. 906 *McCulloh St.*
S. B., St. John's College, 1893. *Physics.*

CHARLES ALEXANDER ROBINSON. Cambridge, N. Y. 906 *McCulloh St.*
A. B., Princeton College, 1894, and A. M., 1895. *Greek, Latin, and Sanskrit.*

REV. WILLIAM ROSENAU. Baltimore. 1618 *Druid Hill Av.*
A. B., University of Cincinnati, 1888; Hebrew Union College of Cincinnati, 1889. *Semitic Languages.*

JOHN JACOB ROTHERMEL. Lancaster, Pa. 1312 *Park Av.*
A. B., Franklin and Marshall College, 1893, and A. M., 1896. *Physics, Electricity, and Mathematics.*

GARNETT RYLAND. Richmond, Va. 1133 *Bolton St.*
A. M., Richmond College, 1892. *Chemistry.*

HENRY NEVILL SANDERS. Toronto, Ont. 2322 *Linden Av.*
A. B., Trinity University (Toronto), 1894. *Greek, Sanskrit, and Latin.*

FREDERICK ALBERT SAUNDERS. Ottawa, Canada. 1114 *McCulloh St.*
A. B., University of Toronto, 1895. *Physics.*

CHARLES ALBERT SAVAGE. Baltimore. 306 *Herald Building.*
A. B., Johns Hopkins University, 1895. *Greek, Latin, and Sanskrit.*

HERBERT ARMISTEAD SAYRE. Montgomery, Ala. 1028 *McCulloh St.*
B. E., University of Alabama, 1893; Ph. D., Johns Hopkins University, 1896. *Mathematics.*

REV. TOBIAS SCHANFARBER. Baltimore. 2030 *Madison Av.*
A. B., University of Cincinnati, 1885; Hebrew Union College of Cincinnati, 1886. *Semitic Languages.*

CHARLES CARROLL SCHENCK. Baltimore. 1007 *St. Paul St.*
A. B., Johns Hopkins University, 1893. *Physics, Mathematics, and Chemistry.*

CHARLES CARRINGTON SCOTT. Fincastle, Va. 803 *W. Fayette St.*
A. B., Hampden-Sidney College, 1888. *Chemistry and Geology.*

JAMES EUSTACE SHAW. Florence, Italy. 1019 *Linden Av.*
A. B., Johns Hopkins University, 1896. *Romance Languages.*

ENOCH WALTER SIKES. Monroe, N. C. 1204 *McCulloh St.*
A. M., Wake Forest College, 1891. *History, Economics, and Jurisprudence.*

EDWARD SELL SMITH. Warren, O. 1028 *McCulloh St.*
A. B., University of Michigan, 1892. *Chemistry and Biology.*

ERNEST ASHTON SMITH. Valdosta, Ga. 1019 *Linden Av.*
A. B., Ohio Wesleyan University, 1888, and A. M., 1891. *Economics.*

CHARLES SNAVELY. Massillon, O. 1214 *Madison Av.*
A. B., Otterbein University, 1894. *History, Economics, and Social Science.*

CHARLES WM. SOMMERVILLE. Hampden-Sidney, Va. 2111 *Guilford Av.*
A. B., and S. B., Hampden-Sidney College, 1890, and A. M., 1896; Union Theological Seminary (Va.), 1895. *History, Economics, and Politics.*

WILLIAM BULL STODDARD. Boulder, Colo. 1424 *Druid Hill Av.*
S. B., University of Colorado, 1894. *Chemistry, Geology, and Mineralogy.*

MERVIN TUBMAN SUDLER. Westover. 1002 *McCulloh St.*
S. B., Maryland Agricultural College, 1894. *Zoology, Physiology, and Botany.*

MORRIS CRATER SUTPHEN. Morristown, N. J. 703 *N. Howard St.*
A. B., Princeton University, 1890, and A. M., 1893. *Latin, Greek, and Sanskrit.*

HUGO PAUL THIEME. Fort Wayne, Ind. 1119 *Bolton St.*
A. B., Johns Hopkins University, 1896. *French, Spanish, and History.*

JOSEPH SEMMES TOBIN. Memphis, Tenn. 1035 *N. Eutaw St.*
A. B., Christian Brothers' College (Memphis), 1896. *Chemistry and Physics.*

CHARLES WILLIAM WAIDNER. Baltimore. 406 *N. Fremont St.*
A. B., Johns Hopkins University, 1896. *Physics.*

GEORGE WASHINGTON WARD. Westminster. 2130 *Bolton Av.*
A. B., Western Maryland College, 1890. *History, Economics, and Sociology.*

CAMPBELL EASTER WATERS. Baltimore. 18*th St., Walbrook.*
A. B., Johns Hopkins University, 1895. *Chemistry, Geology, and Physics.*

JAMES BLANTON WHAREY. Mooresville, N. C. 424 *N. Greene St.*
A. B., Davidson College, 1892, and A. M., 1894. *English, German, and French.*

WILLIAM BRYANT WILCOX. Crown Point, N.Y. 1033 *McCulloh St.*
A. B., Middlebury College, 1896. *Chemistry.*

WILLIAM HENRY WILHELM. Baltimore County. 1002 *McCulloh St.*
A. B., and S. B., St. John's College, 1898. *Mathematics, Astronomy, and Philosophy.*

CHARLES BURGESS WILLIAMS. Raleigh, N. C. 1424 *Druid Hill Av.*
S. B., North Carolina Agricultural College, 1898, and M. S., 1896. *Chemistry, Physics, and Geology.*

FRANK DANIEL WILSON. Chatham, Va. 1214 *Eutaw Place.*
S. B., Virginia Polytechnic Institute, 1894, and M. S., 1896. *Chemistry, Mineralogy, and Physics.*

JAMES HENRY CURRY WINSTON. Farmville, Va. 803 *W. Lafayette Av.*
A. B., and S. B., Hampden-Sidney College, 1894. *Chemistry and Mathematics.*
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ATTENDANTS ON SINGLE COURSES OF LECTURES.

Geology.

JAMES A. MITCHELL. Emmittsburg. *Emmittsburg.*
A. M., Mt. St. Mary's College, 1888; Ph. D., Niagara University, 1894; Professor of Geology, Mt. St. Mary's College.

Biology.

REV. ARSENIUS BOYER. Baltimore. *St. Mary's Seminary.*
Seminary of St. Sulpice (Paris), 1878.

Chemistry.

HAROLD JOHN TURNER. Baltimore. 212 *E. Lafayette Av.*
A. B., Johns Hopkins University, 1892.

Mathematics.

STEPHEN CLOUD HARRY. Baltimore. 1221 *Druid Hill Av.*
A. B., Johns Hopkins University, 1894.

JOSEPH CHARLES JUDGE. Baltimore. *Remington Av. and 30th St.*
A. B., Loyola College, 1896.

Physics.

CARLOS DIAZ LECUNA. Caracas, Venezuela. 220 *W. Madison St.*
C. E., University of Caracas, 1893.

German.

CHARLES FRANCIS WOODS, JR. Baltimore. 2315 *Maryland Av.*
A. B., Johns Hopkins University, 1891, and Ph. D., 1897.

English.

REV. JAMES CALLAGHAN. Baltimore. *St. Mary's Seminary.*
Seminary of St. Sulpice (Paris).

REV. GEORGE HINES. Baltimore. 1921 *Hollins St.*
Westminster (Md.) Theological Seminary, 1893.

HENRY SKINNER WEST. Baltimore. 2419 *Maryland Av.*
A. B., Johns Hopkins University, 1898.

Economics.

ELIAS OLIVER GRIMES, JR. Westminster. 251 *W. Hoffman St.*
A. B., Western Maryland College, 1896: Law School, University of Maryland.

Semitic Languages.

REV. WILLIAM CALDWELL. Baltimore. 301 *E. North Av.*
A.M., Southwestern Presbyterian University, 1888; Princeton Theological Seminary, 1891.

MEDICAL STUDENTS.

CANDIDATES FOR THE DEGREE OF M. D.

Fourth Year.

CHARLES RUSSELL BARDEEN. Syracuse, N. Y. 1200 *Guilford Av.*
A. B., Harvard University, 1893.

THOMAS RICHARDSON BROWN. Baltimore. 1033 *Cathedral St.*
A. B., Johns Hopkins University, 1892.

WALTER S. DAVIS. Minneapolis, Minn. 1005 *N. Charles St.*
S. B., Amherst College, 1893.

LESTER WIGGINS DAY. Baltimore. 47 *W. Mt. Royal Av.*
Ph. B., Yale University, 1893.

LOUIS PHILIP HAMBURGER. Baltimore. 1501 *Eutaw Place.*
A. B., Johns Hopkins University, 1893.

GUY LE ROY HUNNER. Madison, Wis. 132 *Jackson Place.*
S. B., University of Wisconsin, 1893.

IRVING PHILLIPS LYON. Hartford, Conn. 717 *N. Calvert St.*
A. B., Yale University, 1893.

WILLIAM GEORGE MACCALLUM. Dunnville, Ont. 1200 *Guilford Av.*
A. B., University of Toronto, 1894.

CHARLES NEIL MCBRYDE. Blacksburg, Va. 1214 *Eutaw Place.*
S. B., University of South Carolina, 1891; M. S., Virginia Polytechnic Institute, 1892.

WILLIAM WATSON MCCULLOH. Baltimore. 929 *McCulloh St.*
A. B., Johns Hopkins University, 1889.

JAMES FARNANDIS MITCHELL. Baltimore. 1013 *Cathedral St.*
A. B., Johns Hopkins University, 1891.

JOSEPH LONGWORTH NICHOLS. Cincinnati, O. 1200 *Guilford Av.*
A. B., Harvard University, 1893.

EUGENE LINDSAY OPIE. Baltimore. 219 *W. Monument St.*
A. B., Johns Hopkins University, 1893.

MARY SECORD PACKARD. Bayonne, N. J. 812 *St. Paul St.*
A. B., Vassar College, 1892; Harvard Summer School, 1893.

OMAR BORTON PANCOAST. Woodstown, N. J. 132 *Jackson Place.*
S. B., Swarthmore College, 1893.

CLEMENT ANDARIESE PENROSE. Baltimore. 1318 *N. Charles St.*
A. B., Johns Hopkins University, 1893.

RICHARD PEARSON STRONG. Baltimore. *Fort McHenry.*
Ph. B., Yale University, 1893.

Third Year.

WILLIAM STEVENSON BAER. Baltimore. 24 *N. Broadway.*
A. B., Johns Hopkins University, 1894.

THOMAS PUMPHREY BENSON. Wellham's X Roads. *Wellham's X Roads.*
A. B., Johns Hopkins University, 1894.

WILLIAM JEPHTHA CALVERT. Lexington, Ky. 1422 *E. Chase St.*
A. B., University of Kentucky, 1893; Graduate Student, Kentucky State College, 1893-94.

PATRICK JOSEPH CASSIDY. Norwich, Conn. 1727 *Fairmount Av.*
A. B., Yale University, 1894.

CORNELIA CHAPEL CHURCH. Pasadena, Cal. 135 *Jackson Place.*
A. B., Smith College, 1888.

JOHN WILLIAMS COE, JR. Meriden, Conn. 1734 *E. Fayette St.*
Ph. B., Yale University, 1893.

WALTER COX. Bel Alton. 1703 *E. Madison St.*
A. B., Johns Hopkins University, 1894.

PERCY MILLARD DAWSON. Montreal, Canada. *The Altamont.*
A. B., Johns Hopkins University, 1894.

ARTHUR WELLS ELTING. Upper Red Hook, N. Y. 412 *N. Broadway.*
A. B., Yale University, 1894.

WILLIAM WEBER FORD. Norwalk, O. 718 *N. Howard St.*
A. B., Adelbert College, 1893.

THOMAS WOOD HASTINGS. Morristown, N. J. 9 *W. Chase St.*
A. B., Johns Hopkins University, 1894.

ALFRED BIRCH HERRICK. Amsterdam, N. Y. 812 *N. Broadway.*
A. B., Williams College, 1894.

MARY MARGARET SEWALL JOHNSTONE. Newburyport, Mass.
A. B., Smith College, 1894; Harvard Summer School, 1894. 417 *N. Charles St.*

JAMES HALL MASON KNOX, JR. Baltimore. 13 *E. Preston St.*
A. B., Yale University, 1892, and Ph. D., 1894; A. M., Lafayette College, 1896.

MILLARD LANGFELD. Baltimore. 2226 *Eutaw Place.*
A. B., Johns Hopkins University, 1893.

GERTRUDE UNDERHILL LIGHT. Milwaukee, Wis. 417 *N. Charles St.*
S. B., University of Wisconsin, 1894.

FRANK ALLEMONG LUPTON. Auburn, Ala. 16 *S. Broadway.*
S. B., Alabama Polytechnic Institute, 1891, and M. S., 1892; Graduate Student, Johns Hopkins University, October to January, 1893-94.

JAMES DANIEL MADISON. Mazomanie, Wis. 1734 *E. Fayette St.*
S. B., University of Wisconsin, 1894.

HARRY TAYLOR MARSHALL. Baltimore. 1209 *St. Paul St.*
A. B., Johns Hopkins University, 1894.

DELIA MARIA O'CONNELL. Marlborough, Mass. 135 *Jackson Place.*
A. B., Vassar College, 1893; Graduate Student, Mass. Institute of Technology, 1893-94.

ROGER GRISWOLD PERKINS. Schenectady, N. Y. 1128 *McCulloh St.*
A. B., Union College, 1893, and Harvard University, 1894.

KATHERINE PORTER. Baltimore. 2100 *N. Calvert St.*
A. B., Bryn Mawr College, 1894.

JOSEPH HERSEY PRATT. North Middleboro, Mass. 1640 *E. Fayette St.*
Ph. B., Yale University, 1894.

GEORGIANA SANDS. Port Chester, N. Y. 851 *N. Eutaw St.*
A. B., Vassar College, 1893; Graduate Student, Barnard College (N. Y.), 1893-94.

BENJAMIN ROBINSON SCHENCK. Syracuse, N. Y. 812 *N. Broadway.*
A. B., Williams College, 1894.

WALTER RALPH STEINER. Baltimore. 1038 *N. Eutaw St.*
A. B., Yale University, 1892, and A. M., 1895; Graduate Student, Johns Hopkins University, 1892-94.

EMMA ELIZABETH WALKER. Parkersburg, W. Va. 417 *N. Charles St.*
A. B., Smith College, 1887.

ANDREW HENDERSON WHITRIDGE. Baltimore. 18 *W. Read St.*
S. B., Harvard University, 1894.

KATHERINE MARGARET WOLFE. Tiffin, O. 118 *Jackson Place.*
B. L. and S. B., Adrian College (Mich.), 1889; Graduate Student, Yale and Chicago Universities, 1892-94.

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Second Year.

LAWRASON BROWN. Baltimore. 1517 *Bolton St.*
A. B., Johns Hopkins University, 1895.

EDWARD ERLE BROWNELL. Woodland, Cal. 1005 *N. Charles St.*
Ph. B., Yale University, 1895.

HUMPHREY WARREN BUCKLER. Baltimore. 806 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

RUFUS IVORY COLE. Peru, Ill. 1727 *Fairmount Av.*
S. B., University of Michigan, 1896.

FRANK CURTISS DAVIS. Minneapolis, Minn. 1005 *N. Charles St.*
A. B., Amherst College, 1895.

JOHN STAIGE DAVIS. Sault Ste Marie, Mich. 517 *Cathedral St.*
Ph. B., Yale University, 1895.

CHARLES PHILLIPS EMERSON. Methuen, Mass. 103 *Jackson Place.*
A. B., Amherst College, 1894.

BLANCH N. EPLER. Oakland, Cal. 125 *E. North Av.*
S. B., University of California, 1895.

JOSEPH ERLANGER. San Francisco, Cal. 1640 *E. Fayette St.*
S. B., University of California, 1895.

PHILIP SAFFERY EVANS, JR. Baltimore. 116 *Jackson Place.*
A. B., Yale University, 1895.

RICHARD HOLDEN FOLLIS, JR. San Francisco, Cal. 517 *Cathedral St.*
Ph. B., Yale University, 1895.

FRANK TAYLOR FULTON. Warsaw, Ill. 1784 *E. Fayette St.*
S. B., Knox College, 1894; A. B., Johns Hopkins University, 1895.

JAMES DATON GALLAGHER. Steubenville, O. 707 *N. Broadway.*
A. B., Johns Hopkins University, 1895.

HENRY HARRIS. Olympia, Wash. 521 *N. Wolfe St.*
A. B., Leland Stanford Jr. University, 1895.

HENRY JOSEPH HOYE. Providence, R. I. 512 *N. Broadway.*
A. B., Brown University, 1895.

LOUIS WILLIAMS LADD. Baltimore. 116 *Jackson Place.*
A. B., Yale University, 1895.

CHARLES SUMNER LITTLE. Evansville, Ind. 1006 *N. Broadway.*
A. B., Wabash College, 1894.

JOHN ARTHUR LUETSCHER. Sauk City, Wis. 104 *Jackson Place.*
S. B., University of Wisconsin, 1895.

FRANK WORTHINGTON LYNCH. Cleveland, O. 718 *N. Howard St.*
A. B., Adelbert College, 1895.

CHESTER LEA MAGEE. San Diego, Cal. 519 *N. Wolfe St.*
A. B., Leland Stanford Jr. University, 1895, and A. M., 1896.

HUGH MILLER MOORE. Oxford, O. 1033 *N. Broadway.*
S. B. and M. S., Miami University, 1895.

EDWARD SPILLER OLIVER. Baltimore. 1725 *Bolton St.*
A. B., Johns Hopkins University, 1895.

CHARLES WILLIAMS OTTLEY. Atlanta, Ga. 1727 *Fairmount Av.*
A. B., Princeton College, 1896.

PAUL OCTAVIUS OWSLEY. Chicago, Ill. 517 *Cathedral St.*
Ph. B., Yale University, 1895.

JACOB HALL PLEASANTS, JR. Baltimore. 606 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

SYLVAN ROSENHEIM. Baltimore. 521 *N. Wolfe St.*
A. B., Johns Hopkins University, 1895.

JOHN ALBERTSON SAMPSON. Troy, N. Y. 103 *Jackson Place.*
A. B., Williams College, 1895.

HARRY MERRIMAN STEELE. Waterbury, Conn. *The Albany.*
Ph. B., Yale University, 1894.

HALBERT SEVERIN STEENSLAND. Madison, Wis. 104 *Jackson Place.*
S. B., University of Wisconsin, 1895.

WILLIAM RIDGELY STONE. Washington, D. C. 113 *W. Mulberry St.*
A. B., Princeton College, 1895.

EDGAR RANDOLPH STROBEL. Baltimore. 1718 *E. Baltimore St.*
A. B., Johns Hopkins University, 1895.

FREDERICK HERMAN VERHOEFF. Louisville, Ky. 935 *St. Paul St.*
Ph. B., Yale University, 1895.

WILLIAM WHITRIDGE WILLIAMS. Baltimore. 1128 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

SARAH DELIA WYCKOFF. Dayton, O. 1910 *E. Madison St.*
S. B., Wellesley College, 1894.

LAWRENCE YATES. Milwaukee, Wis. 1005 *N. Charles St.*
Ph. B., Yale University 1894; S. B., University of Wisconsin, 1895.

First Year.

JOSEPH AKERMAN. Athens, Ga. 1727 *Fairmount Av.*
A. B., University of Georgia, 1894, and Graduate Student, 1895-96.

HERBERT WILLIAMS ALLEN. Oakland, Cal. 812 *N. Broadway.*
S. B., University of California, 1896.

MABEL FLETCHER AUSTIN. Minneapolis, Minn. 812 *St. Paul St.*
S. B., University of Minnesota, 1893.

ALMA EMERSON BEALE. Schaghticoke, N. Y. 2520 *E. Baltimore St.*
A. B., Wellesley College, 1891; Marine Biological Laboratory, Wood's Holl, 1893.

MILTON BETTMANN. Cincinnati, O. 1705 *Fairmount Av.*
Harvard University.*

EVELYN BRIGGS. Wadsworth, O. 214 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1896.

HERMAN BRÜLLE. Fredericksburg, Va. 1016 *N. Fulton Av.*
A. B. and S. B., Hampden-Sidney College, 1895; Graduate Student, Johns Hopkins University, 1895-96.

CURTIS FIELD BURNAM. Richmond, Ky. 1128 *McCulloh St.*
A. B., Central University (Ky.), 1895; Graduate Student, Johns Hopkins University, 1895-96.

ELEANOR SARAH CHACE. Fall River, Mass. 127 *Jackson Place.*
S. B., Wellesley College, 1894.

ARTHUR SMITH CHITTENDEN. Binghamton, N. Y. 1757 *Jefferson St.*
A. B., Yale University, 1896.

HENRY ASBURY CHRISTIAN. Lynchburg, Va. 144 *Jackson Place.*
A. B. and A. M., Randolph-Macon College, 1895, and Graduate Student, 1895-96.

WILLIAM REMSHART DANCY. Savannah, Ga. 802 *N. Broadway.*
S. B., University of Georgia, 1896.

AUGUSTUS HARTJE EGGERS. Allegheny, Pa. 806 *N. Broadway.*
Ph. B., Yale University, 1896.

HENRY COURTNEY EVANS. Youngstown, O. 718 *N. Howard St.*
A. B., Adelbert College, 1896.

ROSE FAIRBANK. Hatfield, Mass. 313 *N. Broadway.*
A. B., Smith College, 1895.

ARTHUR LAWRENCE FISHER. San Francisco, Cal. 1640 *E. Fayette St.*
S. B., University of California, 1896.

WILLIAM ALEXANDER FISHER, JR. Baltimore. 905 *Cathedral St.*
A. B., Princeton University, 1896.

HOWARD FLETCHER. Warrenton, Va. 1757 *Jefferson St.*
A. B., Randolph-Macon College, 1895, and Graduate Student, 1895-96.

JOSEPH MARSHALL FLINT. Chicago, Ill.
S. B., University of Chicago, 1895.

WILLIAM PATRICK HEALY. Bridgeport, Conn. 806 *N. Broadway.*
Ph. B., Yale University, 1896.

WILLIAM FAITHFUL HENDRICKSON. Baltimore. 236 *N. Carey St.*
A. B., Johns Hopkins University, 1896.

* All the courses required for the degree of Bachelor of Arts at Harvard University have been completed by Mr. Bettmann. The diploma will be granted in June, 1897.

WILLIAM CRISSEY KELLOGG. New Canaan, Conn. 806 *N. Broadway.*
A. B., Yale University, 1896.

PRESTON KYES. North Jay, Me. 813 *N. Broadway.*
A. B., Bowdoin College, 1896.

WARREN HARMON LEWIS. Oak Park, Ill. 116 *Jackson Place.*
S. B., University of Michigan, 1894, and Graduate Student, 1894-96.

HARRY WILSON LITTLE. Evansville, Ind. 1006 *N. Broadway.*
S. B., Wabash College, 1896.

ELLEN LOUISE LOWELL. Calais, Me. 811 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1896.

JOHN BRUCE MACCALLUM. Dunnville, Ont. 1200 *Guilford Av.*
A. B., University of Toronto, 1896.

MARY WILBUR MARVELL. Fall River, Mass. 127 *Jackson Place.*
S. B., Wellesley College, 1894.

CLARA R. MELTZER. New York City. 214 *N. Broadway.*
A. B., Barnard College, Columbia University, 1896.

CLELIA DUEL MOSHER. Stanford Univ., Cal. 811 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1893, and A. M., 1894.

HANNAH GLIDDEN MYRICK. Dorchester, Mass. 118 *Jackson Place.*
A. B., Smith College, 1896.

ANNA ODELL. Detroit, Mich. 214 *N. Broadway.*
A. B., Vassar College, 1896.

RICHARD FORSTER RAND. Meriden, Conn. 1707 *Fairmount Av.*
Ph. B., Yale University, 1895, and Graduate Student, 1895-96.

DOROTHY M. REED. Leyden, N. Y. 812 *St. Paul St.*
B. L., Smith College, 1895; Graduate Student, Mass. Institute of Technology, 1895-96.

GLANVILLE YEISLEY RUSK. Baltimore. 2000 *E. Baltimore St.*
A. B., Johns Hopkins University, 1896.

FLORENCE RENA SABIN. Denver, Colo. 118 *Jackson Place.*
S. B., Smith College, 1893, and Assistant in Zoölogy, 1895-96.

WILLIAM FRANCIS MATTINGLY SOWERS. Washington, D. C.
A. B., Princeton University, 1896. 515 *Cathedral St.*

ELLEN APPLETON STONE. Providence, R. I. 214 *N. Broadway.*
A. B., Radcliffe College, Harvard University, 1895; A. M., Brown University, 1896.

LAWRENCE HAWTHORN THAYER. Granville, O. 819 *N. Broadway.*
A. B., Denison University, 1896.

MORTIMER WARREN. Cumberland Mills, Me. 813 *N. Broadway.*
A. B., Bowdoin College, 1896.

JOHN MONTGOMERY WEST. Baltimore. 2419 *Maryland Av.*
A. B., Johns Hopkins University, 1896.

PAUL GERHARDT WOOLLEY. Chicago, Ill. 1421 *McCulloh St.*
S. B., University of Chicago, 1896.

Physicians Attending Special Courses.

Sheldon Amos. Baltimore. 1114 *McCulloh St.*
University College, London; London Medical School for Women. *Special Research.*

Claribel Cone. Baltimore. 1607 *Eutaw Place.*
M. D., Woman's Medical College (Balt.), 1890. *Special Research.*

William B. Ewing. Pittsburg, Pa. 1757 *Jefferson St.*
M. D., Western University of Pennsylvania, 1896. *Special Research.*

Alice Hamilton. Fort Wayne, Ind. 1128 *McCulloh St.*
M. D., University of Michigan, 1893. *Special Research.*

Francis J. Kirby. Baltimore. *St. Joseph's Hospital.*
M. D., University of Maryland, 1892. *Anatomy.*

Augustus Korndörfer, Jr. Philadelphia, Pa. 1629 *Madison Av.*
M. D., Hahnemann Medical College (Phila.), 1896. *Special Research.*

Caroline Wormeley Latimer. Howard County. 517 *Cathedral St.*
M. D., Woman's Medical College (Balt.), 1890; A. B. and A. M., Bryn Mawr College, 1896. *Special Research.*

Stewart Paton. Baltimore. 58 *W. Biddle St.*
M. D., College of Physicians and Surgeons (N. Y.), 1889. *Anatomy.*

Charles H. Potter. Cleveland, O. 1520 *Mt. Royal Av.*
Special Research.

William S. Smith. Baltimore. 422 *Hanover St.*
M. D., University of Maryland, 1883. *Gynecology.*

Cunningham Wilson. Birmingham, Ala. 811 *N. Calvert St.*
M. D., University of Pennsylvania, 1884. *Special Research.*

The regular courses for graduates in medicine will begin in May, 1897. The names of those who follow these courses will appear in the next Register.

UNDERGRADUATE STUDENTS.

MATRICULATES.

HERBERT HENRY ADAMS. Washington, D. C. 1002 *Cathedral St.*
Washington High School. *Group II.*

FREDERICK HARRY BAETJER. Winchester, Va. 615 *Park Av.*
Dr. Deichmann's School. *Group III.*

ROBERT ERNEST BELKNAP. Yonkers, N. Y. 9 *W. Chase St.*
Yonkers High School. *Group III.*

ODIN BALTIMORE BESTOR. Baltimore. 732 *W. North Av.*
McDonogh School. *Group II.*

FRANK RINGGOLD BLAKE. Baltimore. 1917 *Druid Hill Av.*
Baltimore City College, 1894. *Group VII.*

HENRY BOGUE. Baltimore. 843 *Park Av.*
Loyola College. *Group I.*

EDWARD LINGAN BOWLUS. Middletown. 1120 *Linden Av.*
Middletown High School. *Group III.*

DUNCAN KENNER BRENT. Baltimore. 816 *St. Paul St.*
Mr. Marston's School. *Group VI.*

BENNET BERNARD BROWNE, JR. Baltimore. 510 *Park Av.*
Mr. C. Maupin, Instructor. *Group III.*

GEORGE MILTENBERGER CLARKE. Baltimore. 206 *Laurens St.*
Mr. Carey's School. *Group VI.*

HENRY WIREMAN COOK. Baltimore. 7 *E. Biddle St.*
Mr. Marston's School. *Group III.*

GEORGE DUGUID DAVIDSON. Baltimore. 1311 *N. Caroline St.*
Dr. Deichmann's School. *Group VII.*

ALBERT CHARLES DIEFFENBACH. Baltimore. 318 *E. Lafayette Av.*
Dr. Deichmann's School. *Group VI.*

GUSTAVUS CHARLES DOHME. Baltimore. 1527 *N. Caroline St.*
Baltimore City College, 1895. *Group III.*

HENRY CARTER DOWNES. Baltimore. 1527 *Park Av.*
Baltimore City College, 1896. *Group VI.*

RALPH DUFFY. Baltimore. 1610 *Park Av.*
Mr. C. Maupin, Instructor. *Group III.*

CHARLES KEYSER EDMUNDS. Baltimore. 1413 *McCulloh St.*
Mr. W. W. Crane, Instructor. *Group II.*

JAMES F. FERGUSON. Baltimore. 873 *Park Av.*
Mr. Marston's School. *Group II.*

JOHN SOMERVILLE FISCHER. Baltimore. 9 *E. Biddle St.*
The Carey School. *Group IV.*

CHARLES WILLIAM WAIDNER. Baltimore. 406 *N. Fremont St.*
A. B., Johns Hopkins University, 1896. *Physics.*

GEORGE WASHINGTON WARD. Westminster. 2130 *Bolton Av.*
A. B., Western Maryland College, 1890. *History, Economics, and Sociology.*

CAMPBELL EASTER WATERS. Baltimore. 13*th St., Walbrook.*
A. B., Johns Hopkins University, 1895. *Chemistry, Geology, and Physics.*

JAMES BLANTON WHAREY. Mooresville, N. C. 424 *N. Greene St.*
A. B., Davidson College, 1892, and A. M., 1894. *English, German, and French.*

WILLIAM BRYANT WILCOX. Crown Point, N.Y. 1033 *McCulloh St.*
A. B., Middlebury College, 1896. *Chemistry.*

WILLIAM HENRY WILHELM. Baltimore County. 1002 *McCulloh St.*
A. B., and S. B., St. John's College, 1898. *Mathematics, Astronomy, and Philosophy.*

CHARLES BURGESS WILLIAMS. Raleigh, N. C. 1424 *Druid Hill Av.*
S. B., North Carolina Agricultural College, 1893, and M. S., 1896. *Chemistry, Physics, and Geology.*

FRANK DANIEL WILSON. Chatham, Va. 1214 *Eutaw Place.*
S. B., Virginia Polytechnic Institute, 1894, and M. S., 1896. *Chemistry, Mineralogy, and Physics.*

JAMES HENRY CURRY WINSTON. Farmville, Va. 803 *W. Lafayette Av.*
A. B., and S. B., Hampden-Sidney College, 1894. *Chemistry and Mathematics.*
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ATTENDANTS ON SINGLE COURSES OF LECTURES.

Geology.

JAMES A. MITCHELL. Emmittsburg. *Emmittsburg.*
A. M., Mt. St. Mary's College, 1888; Ph. D., Niagara University, 1894; Professor of Geology, Mt. St. Mary's College.

Biology.

REV. ARSENIUS BOYER. Baltimore. *St. Mary's Seminary.*
Seminary of St. Sulpice (Paris), 1878.

Chemistry.

HAROLD JOHN TURNER. Baltimore. 212 *E. Lafayette Av.*
A. B., Johns Hopkins University, 1892.

Mathematics.

STEPHEN CLOUD HARRY. Baltimore. 1221 *Druid Hill Av.*
A. B., Johns Hopkins University, 1894.

JOSEPH CHARLES JUDGE. Baltimore. *Remington Av. and 30th St.*
A. B., Loyola College, 1896.

Physics.

CARLOS DIAZ LECUNA. Caracas, Venezuela. 220 *W. Madison St.*
C. E., University of Caracas, 1893.

German.

CHARLES FRANCIS WOODS, JR. Baltimore. 2315 *Maryland Av.*
A. B., Johns Hopkins University, 1891, and Ph. D., 1897.

English.

REV. JAMES CALLAGHAN. Baltimore. *St. Mary's Seminary.*
Seminary of St. Sulpice (Paris).

REV. GEORGE HINES. Baltimore. 1921 *Hollins St.*
Westminster (Md.) Theological Seminary, 1893.

HENRY SKINNER WEST. Baltimore. 2419 *Maryland Av.*
A. B., Johns Hopkins University, 1898.

Economics.

ELIAS OLIVER GRIMES, JR. Westminster. 251 *W. Hoffman St.*
A. B., Western Maryland College, 1896; Law School, University of Maryland.

Semitic Languages.

REV. WILLIAM CALDWELL. Baltimore. 301 *E. North Av.*
A.M., Southwestern Presbyterian University, 1888; Princeton Theological Seminary, 1891.

MEDICAL STUDENTS.

CANDIDATES FOR THE DEGREE OF M. D.

Fourth Year.

CHARLES RUSSELL BARDEEN. Syracuse, N. Y. 1200 *Guilford Av.*
A. B., Harvard University, 1893.

THOMAS RICHARDSON BROWN. Baltimore. 1033 *Cathedral St.*
A. B., Johns Hopkins University, 1892.

WALTER S. DAVIS. Minneapolis, Minn. 1005 *N. Charles St.*
S. B., Amherst College, 1893.

LESTER WIGGINS DAY. Baltimore. 47 *W. Mt. Royal Av.*
Ph. B., Yale University, 1893.

LOUIS PHILIP HAMBURGER. Baltimore. 1501 *Eutaw Place.*
A. B., Johns Hopkins University, 1893.

GUY LE ROY HUNNER. Madison, Wis. 132 *Jackson Place.*
S. B., University of Wisconsin, 1893.

IRVING PHILLIPS LYON. Hartford, Conn. 717 *N. Calvert St.*
A. B., Yale University, 1893.

WILLIAM GEORGE MACCALLUM. Dunnville, Ont. 1200 *Guilford Av.*
A. B., University of Toronto, 1894.

CHARLES NEIL MCBRYDE. Blacksburg, Va. 1214 *Eutaw Place.*
S. B., University of South Carolina, 1891; M. S., Virginia Polytechnic Institute, 1892.

WILLIAM WATSON MCCULLOH. Baltimore. 929 *McCulloh St.*
A. B., Johns Hopkins University, 1889.

JAMES FARNANDIS MITCHELL. Baltimore. 1013 *Cathedral St.*
A. B., Johns Hopkins University, 1891.

JOSEPH LONGWORTH NICHOLS. Cincinnati, O. 1200 *Guilford Av.*
A. B., Harvard University, 1893.

EUGENE LINDSAY OPIE. Baltimore. 219 *W. Monument St.*
A. B., Johns Hopkins University, 1893.

MARY SECORD PACKARD. Bayonne, N. J. 812 *St. Paul St.*
A. B., Vassar College, 1892; Harvard Summer School, 1893.

OMAR BORTON PANCOAST. Woodstown, N. J. 132 *Jackson Place.*
S. B., Swarthmore College, 1893.

CLEMENT ANDARIESE PENROSE. Baltimore. 1318 *N. Charles St.*
A. B., Johns Hopkins University, 1893.

RICHARD PEARSON STRONG. Baltimore. *Fort McHenry.*
Ph. B., Yale University, 1893.

Third Year.

WILLIAM STEVENSON BAER. Baltimore. 24 *N. Broadway.*
A. B., Johns Hopkins University, 1894.

THOMAS PUMPHREY BENSON. Wellham's X Roads. *Wellham's X Roads.*
A. B., Johns Hopkins University, 1894.

WILLIAM JEPHTHA CALVERT. Lexington, Ky. 1422 *E. Chase St.*
A. B., University of Kentucky, 1893; Graduate Student, Kentucky State College, 1893-94.

PATRICK JOSEPH CASSIDY. Norwich, Conn. 1727 *Fairmount Av.*
A. B., Yale University, 1894.

CORNELIA CHAPEL CHURCH. Pasadena, Cal. 135 *Jackson Place.*
A. B., Smith College, 1888.

JOHN WILLIAMS COE, JR. Meriden, Conn. 1734 *E. Fayette St.*
Ph. B., Yale University, 1893.

WALTER COX. Bel Alton. 1703 *E. Madison St.*
A. B., Johns Hopkins University, 1894.

PERCY MILLARD DAWSON. Montreal, Canada. *The Altamont.*
A. B., Johns Hopkins University, 1894.

ARTHUR WELLS ELTING. Upper Red Hook, N. Y. 412 *N. Broadway.*
A. B., Yale University, 1894.

WILLIAM WEBER FORD. Norwalk, O. 718 *N. Howard St.*
A. B., Adelbert College, 1893.

THOMAS WOOD HASTINGS. Morristown, N. J. 9 *W. Chase St.*
A. B., Johns Hopkins University, 1894.

ALFRED BIRCH HERRICK. Amsterdam, N. Y. 812 *N. Broadway.*
A. B., Williams College, 1894.

MARY MARGARET SEWALL JOHNSTONE. Newburyport, Mass.
A. B., Smith College, 1894; Harvard Summer School, 1894. 417 *N. Charles St.*

JAMES HALL MASON KNOX, JR. Baltimore. 13 *E. Preston St.*
A. B., Yale University, 1892, and Ph. D., 1894; A. M., Lafayette College, 1896.

MILLARD LANGFELD. Baltimore. 2226 *Eutaw Place.*
A. B., Johns Hopkins University, 1893.

GERTRUDE UNDERHILL LIGHT. Milwaukee, Wis. 417 *N. Charles St.*
S. B., University of Wisconsin, 1894.

FRANK ALLEMONG LUPTON. Auburn, Ala. 16 *S. Broadway.*
S. B., Alabama Polytechnic Institute, 1891, and M. S., 1892; Graduate Student, Johns Hopkins University, October to January, 1893-94.

JAMES DANIEL MADISON. Mazomanie, Wis. 1734 *E. Fayette St.*
S. B., University of Wisconsin, 1894.

HARRY TAYLOR MARSHALL. Baltimore. 1209 *St. Paul St.*
A. B., Johns Hopkins University, 1894.

DELIA MARIA O'CONNELL. Marlborough, Mass. 135 *Jackson Place.*
A. B., Vassar College, 1893; Graduate Student, Mass. Institute of Technology, 1893-94.

ROGER GRISWOLD PERKINS. Schenectady, N. Y. 1128 *McCulloh St.*
A. B., Union College, 1893, and Harvard University, 1894.

KATHERINE PORTER. Baltimore. 2100 *N. Calvert St.*
A. B., Bryn Mawr College, 1894.

JOSEPH HERSEY PRATT. North Middleboro, Mass. 1640 *E. Fayette St.*
Ph. B., Yale University, 1894.

GEORGIANA SANDS. Port Chester, N. Y. 851 *N. Eutaw St.*
A. B., Vassar College, 1893; Graduate Student, Barnard College (N. Y.), 1893-94.

BENJAMIN ROBINSON SCHENCK. Syracuse, N. Y. 812 *N. Broadway.*
A. B., Williams College, 1894.

WALTER RALPH STEINER. Baltimore. 1038 *N. Eutaw St.*
A. B., Yale University, 1892, and A. M., 1895; Graduate Student, Johns Hopkins University, 1892-94.

EMMA ELIZABETH WALKER. Parkersburg, W. Va. 417 *N. Charles St.*
A. B., Smith College, 1887.

ANDREW HENDERSON WHITRIDGE. Baltimore. 18 *W. Read St.*
S. B., Harvard University, 1894.

KATHERINE MARGARET WOLFE. Tiffin, O. 118 *Jackson Place.*
B. L. and S. B., Adrian College (Mich.), 1889; Graduate Student, Yale and Chicago Universities, 1892-94.

(29)

Second Year.

LAWRASON BROWN. Baltimore. 1517 *Bolton St.*
A. B., Johns Hopkins University, 1895.

EDWARD ERLE BROWNELL. Woodland, Cal. 1005 *N. Charles St.*
Ph. B., Yale University, 1895.

HUMPHREY WARREN BUCKLER. Baltimore. 806 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

RUFUS IVORY COLE. Peru, Ill. 1727 *Fairmount Av.*
S. B., University of Michigan, 1896.

FRANK CURTISS DAVIS. Minneapolis, Minn. 1005 *N. Charles St.*
A. B., Amherst College, 1895.

JOHN STAIGE DAVIS. Sault Ste Marie, Mich. 517 *Cathedral St.*
Ph. B., Yale University, 1895.

CHARLES PHILLIPS EMERSON. Methuen, Mass. 103 *Jackson Place.*
A. B., Amherst College, 1894.

BLANCH N. EPLER. Oakland, Cal. 125 *E. North Av.*
S. B., University of California, 1895.

JOSEPH ERLANGER. San Francisco, Cal. 1640 *E. Fayette St.*
S. B., University of California, 1895.

PHILIP SAFFERY EVANS, JR. Baltimore. 116 *Jackson Place.*
A. B., Yale University, 1895.

RICHARD HOLDEN FOLLIS, JR. San Francisco, Cal. 517 *Cathedral St.*
Ph. B., Yale University, 1895.

FRANK TAYLOR FULTON. Warsaw, Ill. 1734 *E. Fayette St.*
S. B., Knox College, 1894; A. B., Johns Hopkins University, 1895.

JAMES DATON GALLAGHER. Steubenville, O. 707 *N. Broadway.*
A. B., Johns Hopkins University, 1895.

HENRY HARRIS. Olympia, Wash. 521 *N. Wolfe St.*
A. B., Leland Stanford Jr. University, 1895.

HENRY JOSEPH HOYE. Providence, R. I. 512 *N. Broadway.*
A. B., Brown University, 1895.

LOUIS WILLIAMS LADD. Baltimore. 116 *Jackson Place.*
A. B., Yale University, 1895.

CHARLES SUMNER LITTLE. Evansville, Ind. 1006 *N. Broadway.*
A. B., Wabash College, 1894.

JOHN ARTHUR LUETSCHER. Sauk City, Wis. 104 *Jackson Place.*
S. B., University of Wisconsin, 1895.

FRANK WORTHINGTON LYNCH. Cleveland, O. 718 *N. Howard St.*
A. B., Adelbert College, 1895.

CHESTER LEA MAGEE. San Diego, Cal. 519 *N. Wolfe St.*
A. B., Leland Stanford Jr. University, 1895, and A. M., 1896.

HUGH MILLER MOORE. Oxford, O. 1033 *N. Broadway.*
S. B. and M. S., Miami University, 1895.

EDWARD SPILLER OLIVER. Baltimore. 1725 *Bolton St.*
A. B., Johns Hopkins University, 1895.

CHARLES WILLIAMS OTTLEY. Atlanta, Ga. 1727 *Fairmount Av.*
A. B., Princeton College, 1898.

PAUL OCTAVIUS OWSLEY. Chicago, Ill. 517 *Cathedral St.*
Ph. B., Yale University, 1895.

JACOB HALL PLEASANTS, JR. Baltimore. 606 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

SYLVAN ROSENHEIM. Baltimore. 521 *N. Wolfe St.*
A. B., Johns Hopkins University, 1895.

JOHN ALBERTSON SAMPSON. Troy, N. Y. 103 *Jackson Place.*
A. B., Williams College, 1895.

HARRY MERRIMAN STEELE. Waterbury, Conn. *The Albany.*
Ph. B., Yale University, 1894.

HALBERT SEVERIN STEENSLAND. Madison, Wis. 104 *Jackson Place.*
S. B., University of Wisconsin, 1895.

WILLIAM RIDGELY STONE. Washington, D. C. 113 *W. Mulberry St.*
A. B., Princeton College, 1895.

EDGAR RANDOLPH STROBEL. Baltimore. 1713 *E. Baltimore St.*
A. B., Johns Hopkins University, 1895.

FREDERICK HERMAN VERHOEFF. Louisville, Ky. 935 *St. Paul St.*
Ph. B., Yale University, 1895.

WILLIAM WHITRIDGE WILLIAMS. Baltimore. 1128 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

SARAH DELIA WYCKOFF. Dayton, O. 1910 *E. Madison St.*
S. B., Wellesley College, 1894.

LAWRENCE YATES. Milwaukee, Wis. 1005 *N. Charles St.*
Ph. B., Yale University 1894; S. B., University of Wisconsin, 1895.

First Year.

JOSEPH AKERMAN. Athens, Ga. 1727 *Fairmount Av.*
A. B., University of Georgia, 1894, and Graduate Student, 1895-96.

HERBERT WILLIAMS ALLEN. Oakland, Cal. 812 *N. Broadway.*
S. B., University of California, 1896.

MABEL FLETCHER AUSTIN. Minneapolis, Minn. 812 *St. Paul St.*
S. B., University of Minnesota, 1893.

ALMA EMERSON BEALE. Schaghticoke, N. Y. 2520 *E. Baltimore St.*
A. B., Wellesley College, 1891; Marine Biological Laboratory, Wood's Holl, 1896.

MILTON BETTMANN. Cincinnati, O. 1705 *Fairmount Av.*
Harvard University.*

EVELYN BRIGGS. Wadsworth, O. 214 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1896.

HERMAN BRÜLLE. Fredericksburg, Va. 1016 *N. Fulton Av.*
A. B. and S. B., Hampden-Sidney College, 1895; Graduate Student, Johns Hopkins University, 1895-96.

CURTIS FIELD BURNAM. Richmond, Ky. 1128 *McCulloh St.*
A. B., Central University (Ky.), 1895; Graduate Student, Johns Hopkins University, 1895-96.

ELEANOR SARAH CHACE. Fall River, Mass. 127 *Jackson Place.*
S. B., Wellesley College, 1894.

ARTHUR SMITH CHITTENDEN. Binghamton, N. Y. 1757 *Jefferson St.*
A. B., Yale University, 1896.

HENRY ASBURY CHRISTIAN. Lynchburg, Va. 144 *Jackson Place.*
A. B. and A. M., Randolph-Macon College, 1895, and Graduate Student, 1895-96.

WILLIAM REMSHART DANCY. Savannah, Ga. 802 *N. Broadway.*
S. B., University of Georgia, 1896.

AUGUSTUS HARTJE EGGERS. Allegheny, Pa. 806 *N. Broadway.*
Ph. B., Yale University, 1896.

HENRY COURTNEY EVANS. Youngstown, O. 718 *N. Howard St.*
A. B., Adelbert College, 1896.

ROSE FAIRBANK. Hatfield, Mass. 313 *N. Broadway.*
A. B., Smith College, 1895.

ARTHUR LAWRENCE FISHER. San Francisco, Cal. 1640 *E. Fayette St.*
S. B., University of California, 1896.

WILLIAM ALEXANDER FISHER, JR. Baltimore. 905 *Cathedral St.*
A. B., Princeton University, 1896.

HOWARD FLETCHER. Warrenton, Va. 1757 *Jefferson St.*
A. B., Randolph-Macon College, 1895, and Graduate Student, 1895-96.

JOSEPH MARSHALL FLINT. Chicago, Ill.
S. B., University of Chicago, 1895.

WILLIAM PATRICK HEALY. Bridgeport, Conn. 806 *N. Broadway.*
Ph. B., Yale University, 1896.

WILLIAM FAITHFUL HENDRICKSON. Baltimore. 236 *N. Carey St.*
A. B., Johns Hopkins University, 1896.

* All the courses required for the degree of Bachelor of Arts at Harvard University have been completed by Mr. Bettmann. The diploma will be granted in June, 1897.

WILLIAM CRISSEY KELLOGG. New Canaan, Conn. 806 *N. Broadway.*
A. B., Yale University, 1896.

PRESTON KYES. North Jay, Me. 813 *N. Broadway.*
A. B., Bowdoin College, 1896.

WARREN HARMON LEWIS. Oak Park, Ill. 116 *Jackson Place.*
S. B., University of Michigan, 1894, and Graduate Student, 1894-96.

HARRY WILSON LITTLE. Evansville, Ind. 1006 *N. Broadway.*
S. B., Wabash College, 1896.

ELLEN LOUISE LOWELL. Calais, Me. 811 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1896.

JOHN BRUCE MACCALLUM. Dunnville, Ont. 1200 *Guilford Av.*
A. B., University of Toronto, 1896.

MARY WILBUR MARVELL. Fall River, Mass. 127 *Jackson Place.*
S. B., Wellesley College, 1894.

CLARA R. MELTZER. New York City. 214 *N. Broadway.*
A. B., Barnard College, Columbia University, 1896.

CLELIA DUEL MOSHER. Stanford Univ., Cal. 811 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1896, and A. M., 1894.

HANNAH GLIDDEN MYRICK. Dorchester, Mass. 118 *Jackson Place.*
A. B., Smith College, 1896.

ANNA ODELL. Detroit, Mich. 214 *N. Broadway.*
A. B., Vassar College, 1896.

RICHARD FORSTER RAND. Meriden, Conn. 1707 *Fairmount Av.*
Ph. B., Yale University, 1895, and Graduate Student, 1895-96.

DOROTHY M. REED. Leyden, N. Y. 812 *St. Paul St.*
B. L., Smith College, 1895; Graduate Student, Mass. Institute of Technology, 1895-96.

GLANVILLE YEISLEY RUSK. Baltimore. 2000 *E. Baltimore St.*
A. B., Johns Hopkins University, 1896.

FLORENCE RENA SABIN. Denver, Colo. 118 *Jackson Place.*
S. B., Smith College, 1893, and Assistant in Zoölogy, 1895-96.

WILLIAM FRANCIS MATTINGLY SOWERS. Washington, D. C.
A. B., Princeton University, 1896. 515 *Cathedral St.*

ELLEN APPLETON STONE. Providence, R. I. 214 *N. Broadway.*
A. B., Radcliffe College, Harvard University, 1895; A. M., Brown University, 1896.

LAWRENCE HAWTHORN THAYER. Granville, O. 819 *N. Broadway.*
A. B., Denison University, 1896.

MORTIMER WARREN. Cumberland Mills, Me. 813 *N. Broadway.*
A. B., Bowdoin College, 1896.

JOHN MONTGOMERY WEST. Baltimore. 2419 *Maryland Av.*
A. B., Johns Hopkins University, 1896.

PAUL GERHARDT WOOLLEY. Chicago, Ill. 1421 *McCulloh St.*
S. B., University of Chicago, 1896.

Physicians Attending Special Courses.

Sheldon Amos. Baltimore. 1114 *McCulloh St.*
University College, London; London Medical School for Women. *Special Research.*

Claribel Cone. Baltimore. 1607 *Eutaw Place.*
M. D., Woman's Medical College (Balt.), 1890. *Special Research.*

William B. Ewing. Pittsburg, Pa. 1757 *Jefferson St.*
M. D., Western University of Pennsylvania, 1896. *Special Research.*

Alice Hamilton. Fort Wayne, Ind. 1128 *McCulloh St.*
M. D., University of Michigan, 1893. *Special Research.*

Francis J. Kirby. Baltimore. *St. Joseph's Hospital.*
M. D., University of Maryland, 1892. *Anatomy.*

Augustus Korndörfer, Jr. Philadelphia, Pa. 1629 *Madison Av.*
M. D., Hahnemann Medical College (Phila.), 1896. *Special Research.*

Caroline Wormeley Latimer. Howard County. 517 *Cathedral St.*
M. D., Woman's Medical College (Balt.), 1890; A. B. and A. M., Bryn Mawr College, 1896. *Special Research.*

Stewart Paton. Baltimore. 58 *W. Biddle St.*
M. D., College of Physicians and Surgeons (N. Y.), 1889. *Anatomy.*

Charles H. Potter. Cleveland, O. 1520 *Mt. Royal Av.*
Special Research.

William S. Smith. Baltimore. 422 *Hanover St.*
M. D., University of Maryland, 1883. *Gynecology.*

Cunningham Wilson. Birmingham, Ala. 811 *N. Calvert St.*
M. D., University of Pennsylvania, 1884. *Special Research.*

The regular courses for graduates in medicine will begin in May, 1897. The names of those who follow these courses will appear in the next Register.

UNDERGRADUATE STUDENTS.

MATRICULATES.

HERBERT HENRY ADAMS. Washington, D. C. 1002 *Cathedral St.*
Washington High School. *Group II.*

FREDERICK HARRY BAETJER. Winchester, Va. 615 *Park Av.*
Dr. Deichmann's School. *Group III.*

ROBERT ERNEST BELKNAP. Yonkers, N. Y. 9 *W. Chase St.*
Yonkers High School. *Group III.*

ODIN BALTIMORE BESTOR. Baltimore. 732 *W. North Av.*
McDonogh School. *Group II.*

FRANK RINGGOLD BLAKE. Baltimore. 1917 *Druid Hill Av.*
Baltimore City College, 1894. *Group VII.*

HENRY BOGUE. Baltimore. 843 *Park Av.*
Loyola College. *Group I.*

EDWARD LINGAN BOWLUS. Middletown. 1120 *Linden Av.*
Middletown High School. *Group III.*

DUNCAN KENNER BRENT. Baltimore. 816 *St. Paul St.*
Mr. Marston's School. *Group VI.*

BENNET BERNARD BROWNE, JR. Baltimore. 510 *Park Av.*
Mr. C. Maupin, Instructor. *Group III.*

GEORGE MILTENBERGER CLARKE. Baltimore. 206 *Laurens St.*
Mr. Carey's School. *Group VI.*

HENRY WIREMAN COOK. Baltimore. 7 *E. Biddle St.*
Mr. Marston's School. *Group III.*

GEORGE DIUGUID DAVIDSON. Baltimore. 1311 *N. Caroline St.*
Dr. Deichmann's School. *Group VII.*

ALBERT CHARLES DIEFFENBACH. Baltimore. 318 *E. Lafayette Av.*
Dr. Deichmann's School. *Group VI.*

GUSTAVUS CHARLES DOHME. Baltimore. 1527 *N. Caroline St.*
Baltimore City College, 1895. *Group III.*

HENRY CARTER DOWNES. Baltimore. 1527 *Park Av.*
Baltimore City College, 1896. *Group VI.*

RALPH DUFFY. Baltimore. 1610 *Park Av.*
Mr. C. Maupin, Instructor. *Group III.*

CHARLES KEYSER EDMUNDS. Baltimore. 1413 *McCulloh St.*
Mr. W. W. Crane, Instructor. *Group II.*

JAMES F. FERGUSON. Baltimore. 873 *Park Av.*
Mr. Marston's School. *Group II.*

JOHN SOMERVILLE FISCHER. Baltimore. 9 *E. Biddle St.*
The Carey School. *Group IV.*

THOMAS FITZGERALD, JR. Baltimore. 1904 *Madison Av.*
Mr. Marston's School. *Group II.*

EDDY BURKE FOSNOCHT. Camden, Del. 342 *W. Biddle St.*
Wilmington Conference Academy. *Group VII.*

LAWRENCE HALL FOWLER. Catonsville. *The Albion.*
Mr. Marston's School. *Group II.*

WILLIAM WILLOUGHBY FRANCIS. Toronto, Ont. 1 *W. Franklin St.*
Trinity College School (Ontario). *Group III.*

SIMON WALTER FRANK. Baltimore. 1506 *Eutaw Place.*
Private Instruction. *Group VI.*

JOHN CALVIN FRENCH. Baltimore. 1505 *W. Lombard St.*
Dr. Deichmann's School. *Group I.*

WILLIAM CAZENOVE GARDNER. Dorsey. *Dorsey.*
Mr. Marston's School. *Group I.*

HOWARD MAIN GASSMAN. Hagerstown. 1120 *Linden Av.*
Washington County High School. *Group II.*

JOHN REED GEMMILL. York, Pa. 914 *McCulloh St.*
York Collegiate Institute. *Group VI.*

ALEXANDER GORDON, JR. Baltimore. 1216 *St. Paul St.*
Mr. Marston's School. *Group VI.*

NEIL DUNCAN GRAHAM. Falls Church, Va. 1120 *McCulloh St.*
St. James Grammar School. *Group III.*

HARRY SELIGER GREENBAUM. Baltimore. 1614 *Eutaw Place.*
Baltimore City College, 1886. *Group III.*

ROBERT HAROLD GRIMES. Baltimore. 2100 *Maryland Av.*
Mr. Marston's School. *Group VI.*

CHARLES SALOMAN GUGGENHEIMER. New York City. 1704 *Madison Av.*
Dr. Halsey's School (N. Y.). *Group VI.*

CLARENCE MAURICE GUGGENHEIMER. Baltimore. 1704 *Madison Av.*
Mr. Marston's School. *Group VI.*

WILLIAM BROWNE HAMMOND, JR. Baltimore. 1516 *E. Biddle St.*
Dr. Deichmann's School. *Group VI.*

FRANK ARNOLD HANCOCK. Baltimore. 823½ *W. Lombard St.*
Mr. Marston's School. *Group IV.*

PHILIP WARNER HARRY. Pylesville. 1434 *McCulloh St.*
Georgetown College (Ky.). *Group I.*

LANDRY HARWOOD. Baltimore. *Roland Park.*
University School (Kansas City). *Group VI.*

STEPHEN PAUL HARWOOD. Baltimore. 756 *N. Eutaw St.*
The Carey School. *Group III.*

EUGENE DE FOREST HEALD, JR. Annapolis. 902 *St. Paul St.*
Emerson Institute. *Group VII.*

LEONARD KEENE HIRSHBERG. Baltimore. 581 *N. Gay St.*
Private Instruction. *Group III.*

CONWAY SHALER HODGES. Baltimore. 24 *W. Saratoga St.*
Dr. Deichmann's School. *Group I.*

WILLIAM RANDLE HUBNER. Catonsville. *Catonsville.*
Dr. Deichmann's School. *Group VI.*

MICHAEL ERNEST JENKINS. Homeland. 1106 *N. Charles St.*
Mr. H. W. Luckett, Instructor. *Group VI.*

ROBERT HENRY JONES. Fairmount. 1002 *McCulloh St.*
Dr. Deichmann's School. *Group I.*

LEON LEWIS JOYNER. Baltimore. 1521 *Edmondson Av.*
Baltimore City College, 1896. *Group VI.*

JOHN ALBERT KALB. Catonsville. *Catonsville.*
Maryland Normal School. *Group V.*

HARRY M. KAUFMAN. Washington, D. C. 2007 *Bolton St.*
Private Instruction. *Group III.*

JOHN HENDRICKEN KING. Baltimore. 1529 *Bolton St.*
Mr. Marston's School. *Group I.*

RUDOLPH KLEINSCHMIDT. St. Louis, Mo. *Mt. Washington.*
St. Louis High School. *Group VI.*

JOHN EDGAR KNIPP. Baltimore. 2510 *Druid Hill Av.*
Milton Academy. *Group I.*

WALTER MARSHALL KRAGER. Baltimore. *The Condon.*
Baltimore City College, 1896. *Group VI.*

GEORGE EDGAR KREBS. Baltimore. 520 *N. Broadway.*
Dr. Deichmann's School. *Group VI.*

HERMAN KURRELMEYER. Baltimore. 1051 *S. Eutaw St.*
Baltimore City College, 1896. *Group VII.*

THEODORE MORGAN LEARY. Baltimore. *Fort McHenry.*
Mr. C. Maupin, Instructor. *Group VII.*

WILLIAM STROBEL LEVY. Frederick. 1428 *Linden Av.*
Frederick College. *Group VI.*

WARFIELD THEOBALD LONGCOPE. Baltimore. 136 *Richmond St.*
Dr. Deichmann's School. *Group III.*

HENRY JOHN LUCKE. Baltimore. 519 *N. Carey St.*
Baltimore City College, 1895. *Group II.*

CHARLES EDWARD LYON. Mt. Wilson. *Druid Hill Av. and Robert St.*
Private Instruction. *Group V.*

DAVID GREGG MCINTOSH, JR. Towson. *Towson.*
Mr. Marston's School. *Group VI.*

FRANK OLDHAM MILLER. Baltimore. 709 *W. Lombard St.*
Dr. Deichmann's School. *Group VII.*

RAYMOND DURBIN MILLER. Catonsville. *Catonsville.*
Baltimore City College, 1895. *Group I.*

PHILIP SIDNEY MORGAN. Baltimore. *Walbrook.*
William Penn Charter School (Phila.). *Group III.*

JAMES MOFFIT MULLEN. Baltimore. 2311 *N. Charles St.*
Mr. Marston's School. *Group VI.*

HARRY HOEN MULLER. Baltimore. 115 *E. Twenty-fifth St.*
Dr. Deichmann's School. *Group III.*

SOLOMON BRENNER MYERS. Baltimore. 1532 *Mt. Royal Av.*
Mr. Marston's School. *Group III.*

JOHN HOWARD PALMER. Baltimore. *Roland Park.*
Dr. Deichmann's School. *Group VII.*

HAROLD PENDER. Baltimore. 1804 *Bolton St.*
McDonogh School. *Group II.*

THOMAS LINDLEY PYLE. Pylesville. 1434 *McCulloh St.*
Private Instruction. *Group I.*

GEORGE LORIC PIERCE RADCLIFFE. Lloyd's. *Sudbrook Park.*
Cambridge (Md.) High School. *Group VI.*

HERBERT MEREDITH REESE. Baltimore. 2132 *Oak St.*
Baltimore Polytechnic Institute. *Group II.*

CHARLES MALLORY REMSEN. Baltimore. 12 *E. Biddle St.*
Mr. Marston's School. *Group IV.*

VINCENT ADAMS RENOUF. Baltimore. 416 *W. Hoffman St.*
Max-Gymnasium, Munich. *Group III.*

LAWRENCE ANTON REYMANN. Wheeling, W.Va. 1605 *St. Paul St.*
Linsley Institute (Wheeling). *Group VI.*

EDWARD AYRAULT ROBINSON, JR. Baltimore. *Mt. Washington.*
Mr. Marston's School. *Group VI.*

GEORGE BARR SCHOLL, Baltimore. 1005 *W. Lanvale St.*
Baltimore City College, 1895. *Group III.*

ALEXANDER HENRY SCHULZ, JR. Baltimore. 225 *S. Broadway.*
Baltimore City College, 1894. *Group I.*

JOHN FREDERICK SCHUNCK. Baltimore. 1711 *Jefferson St.*
Dr. Deichmann's School. *Group I.*

ALEXANDER LAZEAR SETH. Baltimore. *Windsor, near Walbrook.*
Baltimore City College, 1895. *Group VI.*

HENRY PLANT SHUTER. Baltimore. 301 *E. North Av.*
Baltimore City College. *Group III.*

JOSIAH MORRIS SLEMONS. Salisbury. 914 *McCulloh St.*
Mr. Marston's School. *Group III.*

FREDERICK WILLIAMSON SMITH. Baltimore. 4 *E. Biddle St.*
Mr. Marston's School. *Group I.*

ROBERT MARSDEN SMITH. Baltimore. 4 *E. Biddle St.*
Mr. Marston's School. *Group I.*

VICTOR EDGEWORTH SMITH. Baltimore. 22 *E. Mt. Vernon Place.*
Private Instruction. *Group I.*

EDWIN ALBERT SPILMAN. Baltimore. 815 *N. Arlington Av.*
Dr. Deichmann's School. *Group I.*

SAMUEL HAMILTON SPRAGINS. Baltimore. 2207 *St. Paul St.*
Mr. Marston's School. *Group I.*

EDWARD SCHWARTZ STANLEY. Baltimore. 1318 *N. Charles St.*
Mr. Marston's School. *Group VI.*

CHARLES MINER STEARNS. Hartford, Conn. 718 *N. Howard St.*
Collins St. Classical School (Hartford). *Group VII.*

ALBERT STEINFELD. Baltimore. 318 *N. Carey St.*
Private Instruction. *Group III.*

WILLIAM PLUNKET STEWART. Baltimore. 329 *Dolphin St.*
Mr. Marston's School. *Group VI.*

ALBERT GAD STIDMAN. Baltimore. 610 *Mosher St.*
Baltimore City College, 1895. *Group VII.*

WILLIAM ELLINGER STRAUS. Baltimore. 1213 *Linden Av.*
Phillips Academy, Andover. *Group IV.*

GEORGE LANE TANEYHILL, JR. Baltimore. 1103 *Madison Av.*
Mr. Marston's School. *Group VII.*

RENÉ TAVEAU. Baltimore. 117 *W. Lafayette Av.*
Dr. Deichmann's School. *Group III.*

RICHARD HENRY THOMAS. Baltimore. 1710 *Bolton St.*
Baltimore City College, 1896. *Group III.*

JAMES MCILHANY THOMSON. Summit Point, W. Va. 1019 *Linden Av.*
Shenandoah University School. *Group VI.*

JOSEPH NATHAN ULMAN. Baltimore. 1829 *Eutaw Place.*
Mr. Marston's School. *Group VI.*

ALBERT JAMES UNDERHILL. Baltimore. *Walbrook.*
Baltimore City College. *Group III.*

LOUIS MARSHALL WARFIELD, JR. Savannah, Ga. 1002 *Cathedral St.*
Lawrenceville School. *Group III.*

DAVID EMRICH WEGLEIN. Baltimore. 1327 *W. Baltimore St.*
Baltimore City College, 1894. *Group II.*

OTTOMAR SIEGMUND WERBER. Baltimore. 913 *N. Calhoun St.*
Dr. Deichmann's School. *Group III.*

THOM DUDLEY WILLIAMS. Baltimore. 1128 *Cathedral St.*
Mr. Marston's School. *Group I.*

HENRY MERRYMAN WILSON. Baltimore. 2133 *Callow Av.*
Dr. Deichmann's School. *Group III.*

CHARLES KNICKERBACKER WINNE, JR. Baltimore. *Fort McHenry.*
Shattuck School. *Group III.*

POWHATAN JOHNSON WOOLDRIDGE. Louisville, Ky. *The Shirley.*
Mr. A. Flexner, Instructor. *Group III.*

JACOB FORNEY YOUNG. Baltimore. 1418 *Druid Hill Av.*
Mr. Marston's School. *Group IV.*

Candidates for Matriculation.

JAMES ROBERT CHARLTON ARMSTRONG. Baltimore. 2523 *Madison Av.*
Mr. C. Maupin, Instructor. *Group IV.*

WILLIAM ERNEST FISHBOURNE ARMSTRONG. Baltimore.
Mr. C. Maupin, Instructor. *Group III.* 2523 *Madison Av.*

ZADOK MARSHALL BALLARD. Baltimore. 114 *W. Mulberry St.*
Calvert Hall College. *Group III.*

BYRON NOBLE BOUCHELLE. Chesapeake City. 1104 *McCulloh St.*
St. John's College. *Preliminary Year.*

AUSTIN ADAMS BREED. Cincinnati, O. 909 *Cathedral St.*
Franklin School. *Preliminary Year.*

EDWARD SKIPWITH BRUCE. Baltimore. 1112 *N. Calvert St.*
Mr. Marston's School. *Group IV.*

LYTTLETON MORGAN CHAMBERS. Baltimore. 317 *Falls Av., Hampden.*
Baltimore City College. *Group I.*

FRANK JACLARD CLUNET. Baltimore. 815 *N. Howard St.*
Mr. C. Maupin, Instructor. *Group VII.*

TALBOTT DENMEAD. Baltimore. 1811 *Maryland Av.*
Mr. Marston's School. *Preliminary Year.*

JOHN RALPH EMERY. Baltimore. 1120 *N. Charles St.*
Private Instruction. *Preliminary Year.*

FERDINAND COLQUHOUN FISHER. Baltimore. 746 *W. North Av.*
Dr. Deichmann's School.

WALTER MELVIN FOOKS. Baltimore. 1519 *E. Baltimore St.*
Mr. Lamb's School. *Group VI.*

CHARLES CARTER GADDESS. Baltimore. 810 *N. Calvert St.*
Mr. Lamb's School. *Group VI.*

HUGH SISSON HANNA. Baltimore. 1037 *Harlem Av.*
Mr. Lamb's School. *Group VI.*

LOUIS WARDLAW HASKELL, JR. Savannah, Ga. 1002 *Cathedral St.*
Private Instruction. *Group III.*

ANDREW DICKSON JONES, JR. Baltimore. 1208 *St. Paul St.*
Dr. Deichmann's School. *Group VI.*

TALBOT DICKSON JONES. Baltimore County. *Relay.*
Private Instruction. *Group VI.*

KARL JUNGBLUTH, JR. Louisville, Ky. *The Shirley.*
Mr. A. Flexner, Instructor. *Group VI.*

MARION JUNGBLUTH. Louisville, Ky. *The Shirley.*
Mr. A. Flexner, Instructor. *Group III.*

CHARLES WESLEY KALB. Catonsville. *Catonsville.*
Dr. Deichmann's School. *Group VI.*

HERBERT KAUFMAN. Washington, D. C. 2036 *Linden Av.*
Emerson Institute. *Preliminary Year.*

ALBERT KEIDEL. Catonsville. *Catonsville.*
Mr. Marston's School. *Group III.*

JAMES ALFRED KENNARD. Baltimore. 1601 *St. Paul St.*
The Carey School. *Group VI.*

GEORGE WROTH KNAPP, JR. Baltimore. 1232 *W. Lafayette Av.*
Mr. Lamb's School. *Group VI.*

MAURICE LAZENBY. Baltimore. 800 *W. North Av.*
Mr. Marston's School. *Group III.*

LOUIS CHARLES LEHR. Baltimore. 12 *E. Chase St.*
Mr. C. Maupin, Instructor. *Group III.*

JOSHUA LEVERING, JR. Baltimore. 1316 *Eutaw Place.*
Mr. Marston's School. *Group VI.*

HENRY CLAY MCCOMAS, JR. Baltimore. 1019 *N. Charles St.*
University of Virginia. *Group VI.*

PHILIP AUSTEN MURKLAND. Baltimore. 502 *Cathedral St.*
Dr. Deichmann's School. *Group I.*

EDWARD LIVINGSTON PALMER, JR. Baltimore. 2420 *Eutaw Place.*
Dr. Deichmann's School. *Group III.*

GEORGE CANBY ROBINSON. Baltimore. *Mt. Washington.*
Mr. Marston's School. *Group III.*

JAMES EDWARD ROUTH. Petersburg, Va. 1225 *Linden Av.*
Private Instruction. *Preliminary Year.*

WILSON LEVERING SMITH. Baltimore. 1011 *St. Paul St.*
Mr. Marston's School. *Preliminary Year.*

MILTENBERGER NEALE SMULL. Baltimore. 102 *E. Twentieth St.*
Dr. Deichmann's School. *Group VII.*

CUSTIS GIBSON STEPHENS. St. Louis, Mo. 722 *N. Carey St.*
Smith Academy (St. Louis). *Preliminary Year.*

ALBERT WHITING TALTY. Washington, D. C. 219 *W. Lanvale St.*
Dr. Deichmann's School. *Group VI.*

GEORGE WILLIAM WARREN. Portland, Me. 1028 *McCulloh St.*
Massachusetts Institute of Technology. *Group III.*

ARTHUR WRIGHT. Baltimore. 727 *Roland Av.*
Mr. C. Maupin, Instructor. *Group III.*

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SPECIAL STUDENTS.

GEORGE EDWARD BARTELL. Baltimore. 2206 *Eutaw Place.*
Mr. C. Maupin, Instructor. *Electricity.*

REINIER KOLLER BEEUWKES. Baltimore. 2005 *Druid Hill Av.*
Baltimore City College, 1895. *Mathematics and Physics.*

RUSSELL BLACKMAN. Gilbertsville, N. Y. 916 *McCulloh St.*
Drexel Institute (Phila.). *Mathematics and Physics.*

ROBERT H. BOGUE. Baltimore. 843 *Park Av.*
Loyola College. *Group VI.*

ALBERT HINSON CARROLL. Baltimore. 18 *E. Madison St.*
Mr. Marston's School. *English, etc.*

GEORGE CATOR. Baltimore. 803 *St. Paul St.*
Mr. Carey's School. *Chemistry.*

WALTER HERMAN EISENBRANDT. Baltimore. 2113 *Bolton Av.*
Baltimore Polytechnic Institute. *Electricity.*

WILLIAM TROUT EVERETT. Baltimore. *Fort McHenry.*
Mr. C. Maupin, Instructor. *Mathematics and Physics.*

CHARLES ELIAS FORD, JR. Baltimore County. *Pikesville.*
Mr. Lamb's School. *Mathematics and Physics.*

WILLIAM SCHROFIELD GORSUCH, JR. Baltimore. 1025 *N. Carey St.*
Private Instruction. *Electricity.*

ELMER HAULENBEEK. Baltimore. 848 *Girard Av.*
Baltimore City College, 1896. *Mathematics and Physics.*

WILLIAM LEMMON HODGES. Baltimore. 1402 *Bolton St.*
Mr. Marston's School. *Electricity.*

THURMER HOGGARD, JR. Norfolk, Va. 208 *W. Franklin St.*
Private Instruction. *Chemistry and Physics.*

HARRY LOUIS HOMER. Baltimore County. *Sherwood.*
Baltimore Polytechnic Institute. *Chemistry and Biology.*

FERDINAND BRAUNS KEIDEL. Catonsville. *Catonsville.*
Baltimore Polytechnic Institute. *Electricity.*

BERTRAM MOTTER KERSHNER. Emmittsburg. 846 *N. Eutaw St.*
Private Instruction. *Electricity.*

FRANK ALBERT KILLMON. St. Denis. *St. Denis.*
Private Instruction. *Group I.*

THOMAS HARMAN KING, JR. Baltimore. 1433 *Edmondson Av.*
Dr. Deichmann's School. *Mathematics and Physics.*

WILLIAM DYER MCCURDY. Baltimore. 878 *W. Fayette St.*
Columbian University. *Greek, History, etc.*

LAWRENCE ALEXANDER NAYLOR. Baltimore. 708 *Lennox St.*
Mr. Lamb's School. *Mathematics and Physics.*

EDWIN DELAPLAINE NELSON. Baltimore County. *Sherwood.*
Mr. Marston's School. *Group III.*

ISRAEL EUCLID RABINOVITCH. Baltimore. 111 *Park Av.*
University of Pennsylvania. *Mathematics.*

WILLIAM EDWARD SCHLOEGEL. Baltimore. 406 *S. Bond St.*
University of Maryland (Law School). *History, etc.*

CHARLES J. SPENCER. Baltimore. 709 *W. Fayette St.*
Baltimore City College. *Electricity.*

JAMES CARLYLE STEPHENS. Norfolk, Va. 932 *Madison Av.*
Norfolk Academy. *Electricity.*

JAMES WILLIAM SWAINE. Baltimore. 1918 *Mt. Royal Av.*
Baltimore City College, 1895. *Mathematics and Physics.*

JAMES DE LANCEY VER PLANCK. Fishkill, N. Y. 1803 *Madison Av.*
Private Instruction. *Physics and Mathematics.*

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ATTENDANTS ON SINGLE COURSES OF LECTURES.

History, Economics, and Politics.

FRANCIS JOSEPH GATELY. Baltimore. 111 *S. Broadway.*
Law School, University of Maryland.

JOHN W. D. JUMP. Easton. 208 *W. Franklin St.*
Law School, University of Maryland.

JOSEPH CRAWFORD NYCE, JR. Baltimore. 1309 *Madison Av.*
Mr. Lamb's School.

M. BARRATT WALKER. Bel Air. 725 *W. Lexington St.*
Law School, University of Maryland.

English.

JAMES TEACKLE DENNIS. Baltimore. 1008 *N. Calvert St.*
Lafayette College.

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GOVERNMENT OF THE JOHNS HOPKINS UNIVERSITY.

TRUSTEES.

The Trustees are the ultimate source of authority in all matters pertaining to the University. They act collectively, through the standing committees named on page 2, and through the President of the University, who is *ex officio* a member of the Board.

PRESIDENT.

Daniel C. Gilman.

The duties of this office were thus defined by the Trustees, September 14, 1876:

The President of the University is the authorized means of communication between the Board and the various officers of instruction and administration employed in the University; it shall be his duty to consult with the Professors in respect to the development of their various departments, and the general interests of the University; to determine the appropriate duties of the Associates and Fellows; and to exercise such superintendence over the buildings, apparatus, books, and other property as will insure their protection and appropriate use. In respect to these matters and all others which concern the welfare of the University, he shall consult frequently with the Executive Committee, and he shall attend the meetings of the Board of Trustees. Purchases, alterations, repairs, and other incidental expenses must not be ordered by any of the officers of the University without his previous assent, or the expressed authority of the Board.

ACADEMIC COUNCIL.

D. C. Gilman (*Pres.*),	H. A. Rowland,	Simon Newcomb.
B. L. Gildersleeve,	Paul Haupt,	E. H. Griffin,
Ira Remsen (*Sec'y*),	W. H. Welch,	H. B. Adams.

By authority of the Trustees, the Academic Council (now consisting of the President and eight Professors) has met since the organization of the University to guide the various departments of study, to select the Fellows, and to act upon such other matters as may be brought before them.

BOARD OF UNIVERSITY STUDIES.

D. C. Gilman (*Pres.*),	Thomas Craig,	Louis Duncan.
B. L. Gildersleeve,	A. M. Elliott,	E. A. Andrews.
Ira Remsen,	H. N. Morse,	J. S. Ames,
H. A. Rowland,	Minton Warren,	K. F. Smith,
Paul Haupt,	Henry Wood,	Adolf Rambeau.
W. H. Welch,	W. H. Howell,	A. S. Chessin.
Simon Newcomb,	J. W. Bright,	C. L. Poor,
E. H. Griffin,	W. Hand Browne,	Sidney Sherwood.
H. B. Adams,	W. B. Clark,	J. M. Vincent.
W. K. Brooks,	E. H. Spieker,	H. F. Reid.
Maurice Bloomfield,		

By request of the Academic Council (October 8, 1883), this Board, consisting of the President, nineteen Professors, and eleven Associate Professors, has charge of the arrangements for the instruction of graduate students, and of the examinations for the degree of Doctor of Philosophy.

ADVISORY BOARD OF THE MEDICAL SCHOOL.

D. C. Gilman (*Pres.*),	H. M. Hurd,	J. J. Abel,
Ira Remsen,	H. A. Kelly,	W. H. Howell,
W. H. Welch (*Dean*),	W. K. Brooks,	F. P. Mall.
William Osler,	W. S. Halsted,	

This Board was constituted by resolution of the Trustees (April 3, 1893) "to report to the Trustees from time to time their suggestions, and to prepare and carry forward the proper arrangements for the instruction and graduation of medical students."

BOARD OF COLLEGIATE ADVISERS.

D. C. Gilman (*Pres.*),	Edward Renouf,	K. F. Smith,
Ira Remsen,	W. H. Howell,	Adolf Rambeau,
E. H. Griffin (*Dean*),	W. Hand Browne,	Sidney Sherwood,
H. B. Adams,	H. E. Greene,	J. M. Vincent,
A. M. Elliott,	E. H. Spieker (*Sec'y*),	L. S. Hulburt,
H. N. Morse,	Louis Duncan,	W. W. Randall,
Minton Warren,	E. A. Andrews,	B. J. Vos.
Henry Wood,	J. S. Ames,	

By request of the Academic Council (May 13, 1882), the Board of Collegiate Advisers, consisting of the President and of representatives from each of the chief departments of undergraduate study, confers upon the progress made by the undergraduates and special students, and conducts the examinations for matriculation and for the baccalaureate degree, under the direction of the Academic Council. The other teachers of undergraduates may be called in from time to time to consult.

By resolution of this Board (June 15, 1888), a Standing Committee was appointed to act on all routine matters. The Committee now consists of E. H. Griffin, E. Renouf, E. H. Spieker, and S. Sherwood.

COMMITTEE ON THE LIBRARY.

D. C. Gilman (*Pres.*),	Ira Remsen,	N. Murray (*Sec'y*).
B. L. Gildersleeve,	W. Hand Browne,	

COMMITTEE ON THE GYMNASIUM.

D. C. Gilman (*Pres.*),	James Carey Thomas, M. D.,	The Director
Alan P. Smith, M. D.,		of the Gymnasium.

ADVISORY BOARD OF THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

D. C. Gilman (*Pres.*),	James Carey Thomas, M. D.,	B. C. Steiner.
E. H. Griffin (*Sec'y*),		

TABULAR STATEMENTS.

1. Professors and Instructors, 1896-97.

President and Professors,	33
Associate Professors,	15
Associates,	22
Instructors and Assistants,	27
Lecturers,	12
	109

The enumeration includes 35 professors and other instructors whose work lies wholly in the Medical School.

2. Enrolled Students, 1896-97.

Fellows by Courtesy,	18
Fellows,	21
Other Graduates,	171
Candidates for the Degree of M. D.,	123
Physicians attending Special Courses,	11
Undergraduates,	144
Special Students,	32
	520

The regular courses for graduates in medicine will be given hereafter in May and June. The names of those attending these courses will appear in the Register of the following year.

The above enumeration of students includes—

Doctors of Philosophy,	12	Bachelors of Science,	67
Doctors of Medicine,	13	Bachelors of Philosophy,	20
Masters of Arts,	47	Other Graduates,	17
Masters of Science,	7	Clergymen,	10
Bachelors of Arts,	227		

3. Attendance upon the Various Courses of Instruction, 1896-97.

Mathematics and Astronomy,	78	Semitic Languages,	28
Physics,	115	German,	139
Chemistry,	117	Romance Languages,	109
Geology and Mineralogy,	26	English and Anglo-Saxon,	122
Biology,	141	History and Political Science,	116
Greek,	42	Philosophy,	44
Latin,	76	Drawing,	77
Sanskrit and Comp. Philology,	34		

4. CLASSIFICATION BY RESIDENCES OF STUDENTS, 1896-97.

Maryland (Baltimore, 206),	254	Minnesota,	4
Virginia,	30	West Virginia,	4
New York,	27	Missouri,	3
Ohio,	22	Texas,	3
Massachusetts,	16	Colorado,	2
Pennsylvania,	16	Michigan,	2
North Carolina,	14	Rhode Island,	2
California,	12	Utah,	2
Connecticut,	12	Delaware,	1
Kentucky,	9	Kansas,	1
Illinois,	9	Louisiana,	1
District of Columbia,	8	Oregon,	1
Maine,	8	Tennessee,	1
Alabama,	7	Washington,	1
Wisconsin,	7		
Indiana,	6	Canada,	12
Georgia,	5	Italy,	2
New Jersey,	5	Japan,	1
South Carolina,	5	Venezuela,	1
Iowa,	4		

5. INSTITUTIONS IN WHICH THE STUDENTS (1896-97) WERE GRADUATED.

Johns Hopkins University,	69	Franklin and Marshall College,	3
Yale University,	27	Ohio Wesleyan University,	3
Dickinson College,	8	Syracuse University,	3
Leland Stanford Jr. University,	8	Virginia Military Institute,	3
Hampden Sidney College,	7	Washington and Lee University,	3
Harvard University,	7	Western Maryland College,	3
Princeton University,	7	Brown University,	2
Smith College,	7	Bryn Mawr College,	2
Wisconsin, University of,	7	Chicago, University of,	2
Amherst College,	6	Georgia, University of,	2
Randolph Macon College,	6	Hebrew Union College,	2
Toronto, University of,	6	Iowa State University,	2
Williams College,	6	Lafayette College,	2
California, University of,	5	Leipsic, University of,	2
Michigan, University of,	5	Loyola College,	2
South Carolina College,		Maryland Agricultural College,	2
St. John's College,	5	Maryland, University of,	2
Bowdoin College,	4	North Carolina, University of,	2
Vassar College,	4	Otterbein University,	2
Wake Forest College,	4	Pennsylvania, University of,	2
Wellesley College,	4	Richmond College,	2
Adelbert College,	3	St. Sulpice, Seminary of (Paris),	2
Alabama, University of,	3	Texas, University of,	2
Cincinnati, University of,	3	Union College,	2

Virginia Polytechnic Institute, 2
Virginia, University of, - - - 2
Wabash College, - - - - - 2
Western University of Pa., - - 2
Woman's Medical College (Balt.), 2
Adrian College, - - - - - - 1
Albion College, - - - - - - 1
Baldwin University, - - - - 1
Barnard College, - - - - - 1
Bethany College, - - - - - 1
Brooklyn Polytechnic Institute, 1
Calvin College, - - - - - - 1
Caracas, University of, - - - 1
Carthage College, - - - - - 1
Catholic University of America, 1
Central University (Ky.), - - 1
Charleston College, - - - - 1
Christian Bros. Col. (Memphis), 1
Christian Bros. Col. (St. Louis), 1
Colby University, - - - - - 1
Colorado, University of, - - - 1
Columbia University, - - - - 1
Columbian University, - - - 1
Cornell University, - - - - 1
Davidson College, - - - - - 1
Denison University, - - - - 1
Doshisha University (Japan), - 1
Earlham College, - - - - - 1
Georgetown University, - - - 1
German Wallace College, - - 1
Giessen, University of, - - - 1
Hahnemann Med. Col. (Phila.), 1
Hamilton College, - - - - - 1
Haverford College, - - - - - 1
Indiana University, - - - - 1
Iowa Agricultural College, - - 1
Knox College, - - - - - - 1
Kentucky State College, - - - 1
Kentucky University, - - - - 1
Kentucky Wesleyan College, - 1
London, University of, - - - 1
Long Island Medical College, - 1
Marietta College, - - - - - 1
Massachusetts Agric. College, - 1
Miami University, - - - - - 1
Middlebury College, - - - - 1
Midland College, - - - - - 1
Milligan College, - - - - - 1
Minnesota, University of, - - 1
Mississippi College, - - - - 1
Mount St. Mary's College, - - 1
Nashville, University of, - - - 1
Niagara University, - - - - 1
North Carolina, University of, - 1
Northern Indiana Normal School, 1
Northwestern University, - - 1
Notre Dame, University of, - - 1
Ohio University, - - - - - 1
Oregon Agricultural College, - 1
Pennsylvania College, - - - - 1
Pennsylvania State College, - - 1
Phys. and Surg., Coll. of (N.Y.), 1
Princeton Theological Seminary, 1
Queen's University (Ont.), - - 1
Radcliffe College, - - - - - 1
Rochester, University of, - - 1
Rock Hill College, - - - - - 1
Rose Polytechnic Institute, - - 1
Southern University, - - - - 1
Southwestern Presbyterian Univ., 1
Stevens Institute of Technology, 1
St. Joseph's College (Ala.), - - 1
St. Lawrence University, - - 1
Swarthmore College, - - - - 1
Tennessee, University of, - - 1
Trinity College (Conn.), - - - 1
Trinity College (N. C.), - - - 1
Trinity University (Ont.), - - 1
Tulane University, - - - - - 1
Union Theological Sem. (N.Y.), 1
U. S. Grant University (Tenn.), 1
Villanova College (Pa.), - - - 1
Wesleyan University (Conn.), - 1
Westminster College (Pa.), - - 1
Westminster (Md.) Theol. Sem., 1
William and Mary College, - - 1
Wittenberg College, - - - - 1
Wofford College, - - - - - 1
Wooster, University of, - - - 1

6. Fellows.

Bruce Memorial Fellows in Biology.

This Fellowship was instituted by Mrs. Bruce, of New York, to commemorate the name of her son, Adam T. Bruce, Jr., Ph. D., Fellow in Biology, 1883–84, and Instructor in Osteology and Mammalian Anatomy, 1886–87. Preference is given to those who have held an ordinary Fellowship in Biology.

1888. Henry Van Peters Wilson, Ph. D. (1888), Professor of Biology, University of North Carolina.

1889. Shozaburo Watase, Ph. D. (1890), Assistant Professor of Cellular Biology, University of Chicago.

1890. Thomas Hunt Morgan, Ph. D. (1890), Professor of Biology, Bryn Mawr College. *Reappointed* 1891, *but resigned.*

1891, 1892. Robert Payne Bigelow, Ph. D. (1892), Instructor in Zoölogy, Massachusetts Institute of Technology.

1893. Maynard Mayo Metcalf, Ph. D. (1893), Associate Professor of Biology, Woman's College of Baltimore.

1894. Ross Granville Harrison, Ph. D. (1894), Instructor in Anatomy (J. H. U.). *Did not enter on the fellowship.*

1894. Seitaro Goto, S. D., Professor of Zoölogy, First High School, Tokyo, Japan.

1895. Henry McElderry Knower, Ph. D. (1896), Instructor in Biology, Williams College.

1895, 1896. George Lefevre, Ph. D. (1896). (Now in residence).

Fellows.

(Arranged under the date of first appointment. Figures in brackets indicate the tenure of the fellowship, when it was held more than one year. *—Deceased.)

1876.

Henry Carter Adams, Ph. D., Professor of Political Economy and Finance, Univ. of Michigan; Statistician, Interstate Commerce Commission.—[1876–79].

Herbert Baxter Adams, Ph. D., LL. D., Professor of American and Institutional History (J. H. U.).—[1876–78].

William Keith Brooks, Ph. D., LL. D., Professor of Zoölogy (J. H. U.); Director of the Chesapeake Zoölogical Laboratory. *Did not enter on the fellowship.*

Samuel Fessenden Clarke, Ph. D., Professor of Natural History, Williams Coll.—[1876–79].

Thomas Craig, Ph. D., Professor of Pure Mathematics (J. H. U.).—[1876–79].

Joshua Walker Gore, C. E., Professor of Natural Philosophy and Engineering, Univ. of North Carolina.—[1876–78].

George Bruce Halsted, Ph. D., Professor of Mathematics, Univ. of Texas.—[1876–78].

Edward Hart, Ph. D., Professor of Analytical Chemistry, Lafayette Coll.—[1876–78].

Daniel Webster Hering, C. E., Professor of Physics, New York Univ.—[1876–78].

Malvern Wells Iles, Ph. D., Chemist, Denver, Colorado.—[1876–78].

William White Jacques, Ph. D., Lecturer on Telegraph Engineering, Mass. Inst. of Tech., 1885–91; Electrician, Boston, Mass.—[1876–79].

Charles Rockwell Lanman, Ph. D., Professor of Sanskrit, Harvard Univ.

David McGregor Means, A. B., Professor of Political and Mental Science, Middlebury Coll., 1877–80; Attorney at Law, New York City.

Harmon Northrop Morse, Ph. D., Professor of Analytical Chemistry (J. H. U.). *Did not enter on the fellowship.*

Walter Hines Page, Professor in Louisville (Ky.) Male High School, 1878–79; Editor of *The Atlantic Monthly*, Boston.—[1876–78].

*Peter Porter Poinier, M. E. *Did not enter on the fellowship.*

Erasmus Darwin Preston, C. E., U. S. Coast and Geodetic Survey, Washington.—[1876–78].

*Henry Joseph Rice, Sc. D., Professor of Natural Sciences, Brooklyn (N. Y.) High School, 1882–85.—[1876–78].

Josiah Royce, Ph. D., Professor of Philosophy, Harvard Univ.—[1876–78].

Alexander Duncan Savage, B. Litt., Farmington, Conn.—[1876–79].

Ernest Gottlieb Sihler, Ph. D., Professor of Latin, New York Univ.—[1876–79].

Frederick Boyd Van Vorst, A. B., Attorney at Law, New York City.

*John Henry Wheeler, Ph. D., Professor of Greek, Univ. of Virginia, 1882–87.

1877.

Francis Greenleaf Allinson, Ph. D., Associate Professor of Greek Literature and History, Brown Univ.—[1877–80].

Fabian Franklin, Ph. D., Assistant, Associate, Associate Professor, and Professor of Mathematics (J. H. U.), 1879–95; Editor of *The Baltimore News*.—[1877–79].

Lyman Beecher Hall, Ph. D., Professor of Chemistry, Haverford Coll.—[1877–79].

Allan Marquand, Ph. D., L. H. D., Professor of Archæology and the History of Art, Princeton.—[1877–80].

1878.

Maurice Bloomfield, Ph. D., LL. D., Professor of Sanskrit and Comparative Philology (J. H. U.).

Constantine Fahlberg, Ph. D., Chemist, Salbke-Westerhusen, Germany.—[1878–80].

Edwin Herbert Hall, Ph. D., Professor of Physics, Harvard Univ.—[1878–80].

Edward Coles Harding, A. M., Professor of Greek, Univ. of Louisiana, 1879–80; Editor, Baltimore.

Rev. Charles Robert Hemphill, D. D., Professor of New Testament Exegesis, Louisville Presbyterian Theol. Sem.; Clergyman, Louisville, Ky.

Isaac Ott, M. D., Professor of Physiology, Medico-Chirurgical Coll. of Philadelphia.

Henry Sewall, Ph. D., M. D., Professor of Physiology, Univ. of Denver.

Christian Sihler, Ph. D., M. D., Instructor and Acting Professor of Histology and Microscopy, Western Reserve Univ., 1889–94; Physician, Cleveland, Ohio.—[1877–79].

Washington Irving Stringham, Ph. D., Professor of Mathematics, Univ. of California.—[1878–80].

Charles Ambrose Van Velzer, S. B., Professor of Mathematics, Univ. of Wisconsin.—[1878–81].

Abram Van Epps Young, Ph. B., Professor of Chemistry, Northwestern Univ.—[1878–80].

1879.

Brown Ayres, S. B., Professor of Physics and Astronomy, Tulane Univ.

Louis Bevier, Ph. D., Professor of Greek, Rutgers Coll.—[1879–81].

William Burney, Ph. D., Professor of Chemistry, Univ. of South Carolina.

Edward Mussey Hartwell, Ph. D., M. D., Director of Physical Training in the Boston Public Schools.—[1879–81].

*John Robin McDaniel Irby, Ph. D.

Mitsuru Kuhara, Ph. D., Professor of Chemistry, First Middle School, Tokio.—[1879–81].

*Oscar Howard Mitchell, Ph. D., Professor of Mathematics, Marietta Coll., 1882–89.—[1879–82].

Edward Leamington Nichols, Ph. D., Professor of Physics, Cornell Univ.

George Frederick Nicolassen, Ph. D., Professor of Greek and German, Southwestern Presbyterian Univ., Tenn.—[1879-81].

Waldo Selden Pratt, A. B., Professor of Ecclesiastical Music and Hymnology, Hartford (Conn.) Theol. Sem.

Robert Woodworth Prentiss, M. S., Professor of Mathematics and Astronomy, Rutgers Coll.—[1879-81].

William Thompson Sedgwick, Ph. D., Professor of Biology, Mass. Inst. of Tech.; Biologist, Mass. Board of Health; Curator, Lowell Inst., Boston.

*Herman Voorhees, C. E. *Did not enter on the fellowship.*

Charles Otis Whitman, Ph. D., LL. D., Professor of Zoölogy, Univ. of Chicago. *Did not enter on the fellowship.*

Edmund Beecher Wilson, Ph. D., Professor of Invertebrate Zoölogy, Columbia Coll.—[1879-81].

1880.

James Wilson Bright, Ph. D., Professor of English Philology (J. H. U.).—[1880-82].

Benjamin Chapman Burt, A. B., Acting Professor of Philosophy and Pedagogy, Univ. of Colorado, 1894-95.

Robert Dorsey Coale, Ph. D., Professor of Chemistry and Toxicology, and Dean of the Medical Faculty, Univ. of Maryland.

Lawrence Bunting Fletcher, Ph. D., Instructor in Physics, Wesleyan Univ., 1882-83; Marlboro, N. Y.

*Spencer Hedden Freeman, A. B., Professor of Physics and Astronomy, Adelbert Coll., 1882-86.—[1880-82].

Kakichi Mitsukuri, Ph. D., Professor of Zoölogy, Univ. of Tokio, Japan.

Bernard Francis O'Connor, Ph. D., Instructor and Adjunct Professor of Romance Languages, Columbia Coll., 1883-91; New York City.—[1880-82].

Chase Palmer, Ph. D., Professor of Chemistry, Manual Training High School, Louisville, Ky.—[1880-82].

Herbert Mills Perry, A. B., late Instructor, Cascadilla School, Ithaca, N. Y.—[1880-82].

William Lee Rowland, S. B., Chemist, Philadelphia, Pa. *Did not enter on the fellowship.*

Andreas Franz Wilhelm Schimper, Ph. D., Professor of Botany, Bonn.

Edward Henry Spieker, Ph. D., Associate Professor of Greek and Latin (J. H. U.).—[1880-82].

Morrison Isaac Swift, Ph. D., Instructor in Philosophy, Hobart Coll., 1882-84.—[1880-82].

*Arthur Wilson Wheeler, A. B.

1881.

William John Alexander, Ph. D., Professor of English, Univ. of Toronto.—[1881-83].

Edward Sanford Burgess, A. B., Professor of Natural Science, Normal Coll., N. Y.

William James Comstock, Ph. B., Instructor in Organic Chemistry, Yale Univ., 1888-93; New Haven, Conn.

William Cathcart Day, Ph. D., Professor of Chemistry and Physics, Swarthmore Coll.—[1881-83].

Henry Herbert Donaldson, Ph. D., Professor of Comparative Neurology, Univ. of Chicago.—[1881-83].

William Pitt Durfee, Ph. D., Professor of Mathematics, Hobart Coll.—[1881-83].

George Stetson Ely, Ph. D., Examiner, U. S. Patent Office.—[1881-83].

Benjamin Ives Gilman, A. B., Curator, Museum of Fine Arts, Boston, Mass.

John Franklin Jameson, Ph. D., Professor of History, Brown Univ.

Charles Herschel Koyl, A. B., Instructor in Physics, Swarthmore Coll., 1887-88; New York City.—[1881-83].

Henry Leslie Osborn, Ph. D., Professor of Biology and Geology, Hamline Univ.

Henry Newlin Stokes, Ph. D., Assistant Professor of Chemistry, Univ. of Chicago, 1892-94; U. S. Geological Survey, Washington.—[1881-83].

Benjamin Willis Wells, Ph. D., Professor of Modern Languages, Univ. of the South. *Resigned, October*, 1881.

1882.

Charles John Bell, A. B., Professor of Chemistry, Univ. of Minnesota. *Did not enter on the fellowship.*

James McKean Cattell, Ph. D., Professor of Psychology, Columbia Coll.

Ellery William Davis, Ph. D., Professor of Mathematics, Univ. of Nebraska.—[1882-84].

David Talbot Day, Ph. D., U. S. Geological Survey, Washington, D. C.—[1882-84].

Alfred Emerson, Ph. D., Associate Professor of Classical Archæology, Cornell Univ.—[1882-84].

William Scott Fleming, A. B., Professor of Greek and German, Davidson Coll., 1883-85; Wetumpka, Ala.

Arthur Lincoln Frothingham, Jr., Ph. D., Professor of Archæology and the History of Art, Princeton.—[1882-85].

Henry Root Goodnow, A. B., New York City.

Elgin Ralston Lovell Gould, Ph. D., Lecturer on Social Economics (J. H. U.); President, City and Suburban Homes Co., New York.—[1882-84].

Arthur Stafford Hathaway, S. B., Professor of Mathematics, Rose Polytech. Inst.—[1882-84].

William Henry Howell, Ph. D., M. D., Professor of Physiology (J. H. U.).—[1882-84].

Edward Harrison Keiser, Ph. D., Professor of Chemistry, Bryn Mawr.—[1882-84].

Arthur Lalanne Kimball, Ph. D., Professor of Physics, Amherst Coll.

Harry Fielding Reid, Ph. D., Associate Professor of Geological Physics (J. H. U.). *Did not enter on the fellowship.*

1883.

William Muss Arnolt, Ph. D., Instructor in Patristic Greek, Univ. of Chicago.—[1883-85].

Gustav Bissing, Ph. D., Principal Examiner, Division A, U. S. Patent Office.

* Adam Todd Bruce, Ph. D., Instructor in Osteology, etc. (J. H. U.), 1886-87.

Archibald Lamont Daniels, D. Sc., Williams Professor of Mathematics and Physics, Univ. of Vermont.

John Dewey, Ph. D., Professor of Philosophy, Univ. of Chicago.

* James Reynolds Duggan, Ph. D., Professor of Chemistry, Wake Forest, 1886-88.

Hans Carl Günther von Jagemann, Ph. D., Assistant Professor of German, Harvard.

* Gustav Adolph Liebig, Jr., Ph. D., Assistant in Electricity (J. H. U.), 1887-90.—[1883-85].

Charles William Emil Miller, Ph. D., Associate in Greek (J. H. U.).—[1883-85].

Charles Albert Perkins, Ph. D., Associate Professor of Physics and Electrical Engineering, Univ. of Tennessee.

Lewis Tebbetts Stevens, M. D., Physician, St. Louis, Mo.

Lewis Webb Wilhelm, Ph. D., Mathematical Instructor, Baltimore.

1884.

Ethan Allen Andrews, Ph. D., Associate Professor of Biology (J. H. U.).—[1884-86].

Henry Crew, Ph. D., Professor of Physics, Northwestern Univ.—[1884-86].

Homer Winthrop Hillyer, Ph. D., Assistant Professor of Organic Chemistry, Univ. of Wisconsin.

Abel Henry Huizinga, Ph. D., Adjunct Professor of Old Testment Literature, &c., McCormick Theol. Sem., Chicago.—[1884-86].

Frederick Schiller Lee, Ph. D., Adjunct Professor of Physiology, Columbia Coll.

Charles Herbert Levermore, Ph. D., Principal of Adelphi College, Brooklyn.
Henry Francis Nachtrieb, S. B., Professor of Biology, Univ. of Minnesota.
Henry Barber Nixon, Ph. D., Professor of Mathematics, Pennsylvania Coll.
William Noyes, Jr., M. D., Superintendent, Boston Insane Hospital, Mattapan, Mass.
Albert Gallatin Palmer, Ph. D., Assistant Professor of Chemistry, Swarthmore Coll., 1886–87; Chemist, Baltimore.
Ernest Mondell Pease, A. B., Professor of Latin, Leland Stanford Jr. Univ.—[1884–86].
Albert Harris Tolman, Ph. D., Assistant Professor of English Literature, Univ. of Chicago. *Did not enter on the fellowship.*
Woodrow Wilson, Ph. D., LL. D., Professor of Jurisprudence and Political Economy, Princeton; Lecturer on Constitutional Law, New York Law School; Lecturer on Local Government (J. H. U.).

1885.

Cyrus Adler, Ph. D., Librarian of the Smithsonian Institution; Professor of Oriental History and Archæology, Columbian Univ.—[1885–87].
*David Barcroft, Ph. D.
William Shirley Bayley, Ph. D., U. S. Geological Survey; Professor of Geology and Mineralogy, Colby Univ.—[March, 1885–June, 1886].
Louis Bell, Ph. D., Professor of Physics and Applied Electricity, Purdue Univ., 1888–90; Chief Engineer, General Electric Company, Chicago, Ill.—[1885–87].
William Henry Burnham, Ph. D., Instructor in Pedagogy, Clark Univ.
Francis Albert Christie, A. B., Professor of Church History, Theol. School, Meadville, Pa.—[1885–87].
Davis Rich Dewey, Ph. D., Professor of Economics and Statistics, Mass. Inst. of Technology.
Albert E. Egge, Ph. D., Professor of English, Washington Agric. Coll.
William Henry Emerson, Ph. D., Professor of Chemistry, Georgia School of Tech.
John Charles Fields, Ph. D., Professor of Mathematics, Allegheny Coll.
Joseph Jastrow, Ph. D., Professor of Experimental Psychology, Univ. of Wisconsin.
George Theophilus Kemp, Ph. D., M. D., Associate Director, Dept. of Physiology, etc., Hoagland Laboratory, Brooklyn, 1887–93; Fellow by Courtesy (J. H. U.).
Marion Dexter Learned, Ph. D., Professor of German, Univ. of Pennsylvania.
Gonzalez Lodge, Ph. D., Professor of Latin, Bryn Mawr College.
Arthur McDonald, A. B., Bureau of Education, Washington, D. C. *Did not enter on the fellowship.*
Charles Skeele Palmer, Ph. D., Professor of Chemistry, Univ. of Colorado.
George Thomas White Patrick, Ph. D., Professor of Philosophy, Iowa State Univ. *Reappointed* 1887, *but resigned.*
Moses Slaughter, Ph. D., Professor of Latin, Iowa Coll.
Charles Whetham, A. B., President of Whetham Coll., Vancouver, B. C., 1890–93; Toronto, Ont.
Charles Baker Wright, A. B., Professor of English Literature and Rhetoric, Middlebury Coll. *Did not enter on the fellowship.*

1886.

Edgar Pierce Allen, A. B., Attorney at Law, Ocala, Fla.—[1886–88].
John Pendleton Campbell, Ph. D., Professor of Biology, Univ. of Georgia.
Henry Clarke, A. B., Classical Instructor, London, England.
Herbert Charles Elmer, Ph. D., Assistant Professor of Latin, Cornell Univ.
Henry Brayton Gardner, Ph. D., Associate Professor of Political Economy, Brown Univ.
*Milton Haight, A. B., Professor of English and Mathematics, Sapporo Agric. Coll., Japan, 1887–92; Instructor, Collegiate Inst., Strathroy, Canada, 1893–96.

John Leslie Hall, Ph. D., Professor of English and History, William and Mary Coll.
Charles Willard Hayes, Ph. D., U. S. Geological Survey, Washington.
George Benjamin Hussey, Ph. D., Docent, Univ. of Chicago.
James Hervey Hyslop, Ph. D., Professor of Logic and Ethics, Columbia Coll.
Andrew Cowper Lawson, Ph. D., Assistant Professor of Mineralogy and Geology, Univ. of California.
Franklin Paine Mall, M. D., Professor of Anatomy (J. H. U.).—[1886-88].
Yujiro Motora, Ph. D., Professor of Psychology, etc., Univ. of Tokio, Japan.
Julius Nelson, Ph. D., Professor of Biology, Rutgers Coll.
William Ridgely Orndorff, Ph. D., Assistant Professor of Chemistry, Cornell Univ.
Daniel Richard Randall, Ph. D., Attorney at Law, Annapolis, Md.
Henry Dallas Thompson, D. Sc., Ph. D., Assistant Professor of Mathematics, Princeton.
Edward Burr Van Vleck, Ph. D., Associate Professor of Mathematics, Wesleyan Univ.
Amos Griswold Warner, Ph. D., Professor of Economics, Leland Stanford Jr. Univ.
John Roaf Wightman, Ph. D., Professor of Romance Languages, Oberlin Coll.

1887.

Joseph Sweetman Ames, Ph. D., Associate Professor of Physics (J. H. U.).
Philip Wheelock Ayres, Ph. D., Secretary, Organized Charities, Chicago, Ill.
William Snyder Eichelberger, Ph. D., Instructor in Mathematics, etc., Wesleyan Univ., 1891-96; U. S. Nautical Almanac, Washington.
Henry Rushton Fairclough, Ph. D., Associate Professor of Greek and Latin, Leland Stanford Jr. Univ. *Did not enter on the fellowship.*
*William Curns Lawrence Gorton, Ph. D., Associate Professor and Professor of Mathematics and Astronomy, Woman's Coll., Baltimore, 1888-94.
William Herbert Hobbs, Ph. D., Assistant Professor of Mineralogy and Metallurgy, Univ. of Wisconsin.
Joseph Hoeing Kastle, Ph. D., Professor of Chemistry, Kentucky State Coll.
Felix Lengfeld, Ph. D., Assistant Professor of Chemistry, Univ. of Chicago.
Archibald MacMechan, Ph. D., Professor of the English Language and Literature, Dalhousie Univ.
Herbert William Magoun, Ph. D., Acting Professor of Greek and Latin, Oberlin, 1892-95; Oberlin, O.
*Thomas McCabe, Ph. D., Associate in Romance Languages, Bryn Mawr, 1890-91.
John Leverett Moore, Ph. D., Professor of Latin, Vassar Coll.
Augustus Taber Murray, Ph. D., Professor of Greek, Leland Stanford Jr. Univ.
Edmund Clark Sanford, Ph. D., Assistant Professor of Psychology, Clark Univ.
Charles Lee Smith, Ph. D., Professor of History, William Jewell Coll., Mo.
Arthur Clarence Wightman, Ph. D., Adjunct Professor of Biology and Physics, Randolph Macon Coll.
Henry Van Peters Wilson, Ph. D., Professor of Biology, Univ. of North Carolina.

1888.

Charles McLean Andrews, Ph. D., Associate Professor of History, Bryn Mawr.
Frank Wilson Blackmar, Ph. D., Professor of History and Sociology, Univ. of Kansas.
Charles Augustus Borst, A. B., Assistant in Astronomy (J. H. U.), 1889-92.
William Merriam Burton, Ph. D., Superintendent, Standard Oil Co., Whiting, Ind.
Morgan Callaway, Jr., Ph. D., Associate Professor of English, Univ. of Texas.
Charles Hiram Chapman, Ph. D., President of the Univ. of Oregon.
Edwin Whitfield Fay, Ph. D., Professor of Latin, Washington and Lee.—[1888-90].
Adam Capen Gill, Ph. D., Assistant Professor of Mineralogy, etc., Cornell Univ.
Joseph Edward Harry, Ph. D., Professor of Greek and German, Georgetown Coll., Ky.
James Taft Hatfield, Ph. D., Professor of German, Northwestern Univ.

George Allison Hench, Ph. D., Professor of German, Univ. of Michigan.
Clifton Fremont Hodge, Ph. D., Assistant Professor of Physiology and Neurology, Clark Univ.
Cary Talcott Hutchinson, Ph. D., Electrician, New York City.
Alvin Frank Linn, Ph. D., Professor of Chemistry and Mineralogy, Wittenberg Coll., O. *Did not enter on the fellowship.*
Thomas Logie, Ph. D., Associate Professor of Romance Languages, Rutgers Coll.
Alfred Edward Thayer, M. D., Physician, New York City.
*James Starr Trueman, A. B., Professor of Greek and Latin, Allegheny Coll., 1889–92.
Shozaburo Watase, Ph. D., Assistant Professor of Cellular Biology, Univ. of Chicago.

1889.

Edward Carey Applegarth, Ph. D., M. D., Physician, Baltimore.
Arthur George Blachstein, A. B., M. D., St. Petersburg, Russia.
Rudolf John Julius de Roode, Jr., Ph. D., Analytical Chemist, New York City.
George Peter Dreyer, Ph. D., Associate in Biology (J. H. U.).
Hermann Louis Ebeling, Ph. D., Professor of Greek, Miami Univ.
Charles Jaques Goodwin, Ph. D., Tutor in Greek, Wesleyan Univ., 1891–95; Fellow by Courtesy (J. H. U.).
Christopher Johnston, Jr., Ph. D., Associate in Semitic Languages (J. H. U.).—[1889–91].
Hiram Benjamin Loomis, Ph. D., Assistant Professor of Physics, Northwestern Univ.
John Hanson Thomas McPherson, Ph. D., Professor of History, Univ. of Georgia.
Thomas Hunt Morgan, Ph. D., Professor of Biology, Bryn Mawr.
Daniel Alexander Murray, Ph. D., Instructor in Mathematics, Cornell Univ.
Charles Lane Poor, Ph. D., Associate Professor of Astronomy (J. H. U.).
George Mann Richardson, Ph. D., Professor of Organic Chemistry, Leland Stanford Jr. Univ.
John Cunningham Robertson, Ph. D., Professor of Greek, St. Stephen's Coll., N. Y.
Charles Hunter Ross, Ph. D., Adjunct Professor of Modern Languages, Alabama Polytech. Inst.
Joseph Samuel Shefloe, Ph. D., Professor of Romance Languages, Woman's Coll., Baltimore.
Robert Benson Steele, Ph. D., Professor of Latin, Illinois Wesleyan Univ.
Bert John Vos, Ph. D., Associate in German (J. H. U.).—[1889–91].
James Albert Woodburn, Ph. D., Professor of American History, Indiana Univ.

1890.

William Wilson Baden, LL. B., Ph. D., Professor of Greek, Central Univ., Ky.—[1890–92].
Robert Payne Bigelow, Ph. D., Instructor in Biology, Mass. Inst. of Tech.
Edwin Grant Conklin, Ph. D., Professor of Comparative Embryology, Univ. of Pennsylvania.
Rev. William Levering Devries, B. D., Ph. D., Clergyman, Washington, D. C.
George Houghton Gilman, A. B., LL. B., Attorney at Law, New York City. *Did not enter on the fellowship.*
Thomas Perrin Harrison, Ph. D., Professor of English, Davidson Coll.
Charles Rollin Keyes, Ph. D., State Geologist, Jefferson City, Mo.
Edwin Seelye Lewis, Ph. D., Assistant Professor of Romance Languages, Princeton.
Arthur Stanley Mackenzie, Ph. D., Associate Professor of Physics, Bryn Mawr.
Henry Parker Manning, Ph. D., Assistant Professor of Pure Mathematics, Brown Univ.
Wilfred Pirt Mustard, Ph. D., Professor of Latin, Haverford Coll.
Barker Newhall, Ph. D., Classical Instructor, Monson, Mass.

Edward Bennett Rosa, Ph. D., Professor of Physics, Wesleyan Univ.
Charles Edward Saunders, Ph. D., Professor of Chemistry, Central Univ., Ky., 1891–93; Ottawa, Canada.
Bernard Christian Steiner, LL. B., Ph. D., Librarian, Enoch Pratt Free Public Library; Associate in History (J. H. U.).
John White, Jr., Ph. D., Instructor in Chemistry, Univ. of Nebraska.
Westel Woodbury Willoughby, Ph. D., Attorney at Law, Washington, D. C.; Associate in Political Science (J. H. U.).

1891.

Edward Ambrose Bechtel, A. B., Instructor in Latin, Northwestern Univ. *Did not enter on the fellowship.*
Julius Blume, Instructor in German, Baltimore.
Albert Bernhardt Faust, Ph. D., Associate Professor of German, Wesleyan Univ.
Simon Flexner, M. D., Associate Professor of Pathology (J. H. U.).
Ulysses Sherman Grant, Ph. D., Assistant State Geologist, Minneapolis, Minn.
William Asbury Harris, Ph. D., Professor of Greek, Baylor Univ., Texas.
Harry Clary Jones, Ph. D., Instructor in Physical Chemistry (J. H. U.).
James Lawrence Kellogg, Ph. D., Professor of Biology, Olivet Coll.
Elmer Peter Kohler, Ph. D., Associate in Chemistry, Bryn Mawr.
* Paul Erasmus Lauer, Ph. D., Assistant Supt. of Schools, Cleveland, O., 1892–93.
David Judson Lingle, Ph. D., Instructor in Physiology, Univ. of Chicago.
John Hanson Thomas Main, Ph. D., Professor of Greek, Iowa Coll.
Frank Jewett Mather, Jr., Ph. D., Instructor in English, Williams Coll.
Michael Andrew Mikkelsen, Ph. D., Montclair, N. J.
John Dyneley Prince, Ph. D., Professor of Semitic Languages, New York Univ.
Brantz Mayer Rossel, Ph. D., Instructor in Physics, Washington (D. C.) High School.
George Owen Squier, Ph. D., First Lieut., U. S. A.; Instructor, Artillery School, Fortress Monroe.
Sidney Grant Stacey, Ph. D., Instructor in Latin, Iowa Coll., 1893–94.
Joseph Moody Willard, A. B., Professor of Mathematics, Pennsylvania State Coll.

1892.

Burleigh Smart Annis, A. B., Instructor in Mathematics, Northwestern Univ.
Lewellys Franklin Barker, M. B., Associate Professor of Anatomy (J. H. U.).—[1892–94].
Melvin Brandow, A. B., Assistant Librarian (J. H. U.).
Alexander Mitchell Carroll, Ph. D., Professor of Greek, Richmond Coll., Va.
Harry Max Ferren, A. B., Instructor in German, Allegheny (Pa.) High School.
David Hull Holmes, Ph. D., Professor of Latin, Univ. of Kansas.
Arthur John Hopkins, Ph. D., Assistant Professor of Chemistry, Amherst Coll.
Theodore Hough, Ph. D., Assistant Professor of Physiology, Mass. Inst. of Tech.
James Alton James, Ph. D., Professor of History, Cornell Coll., Iowa.
Francis Plaisted King, A. B., Fellow by Courtesy (J. H. U.).
Emory Bair Lease, Ph. D., Assistant Professor of Latin, Univ. of Michigan.
* Edward Payson Manning, Ph. D., Instructor in Mathematics, St. Lawrence Univ., 1894–95.
Louis Emil Menger, Ph. D., Associate in Romance Languages (J. H. U.).
* Lucius Salisbury Merriam, Ph. D., Instructor in Political Economy, Cornell Univ., 1893–94.
Mayo Maynard Metcalf, Ph. D., Associate Professor of Biology, Woman's Coll., Baltimore.
René de Poyen-Bellisle, Ph. D., Instructor in Romance Philology, Univ. of Chicago.
Arthur Percy Saunders, Ph. D., Instructor in Chemistry, Univ. of Wisconsin.

Daniel Gurden Stevens, Jr., Ph. D., Student, Crozer Theol. Sem.—[1892–94].
Frederick Tupper, Jr., Ph. D., Professor of English, Univ. of Vermont.
Frank Alfred Wolff, Jr., Ph. D., Chemist, Department of Agriculture, Washington.

1893.

Thomas Stockham Baker, Ph. D., Instructor in German (J. H. U.).
John Spencer Bassett, Ph. D., Professor of History, Trinity Coll., N. C.
George Melville Bolling, Ph. D., Fellow by Courtesy (J. H. U.); Instructor in Sanskrit and Comparative Philology, Catholic Univ.
Abraham Cohen, Ph. D., Instructor in Mathematics (J. H. U.).
Ervin Sidney Ferry, S. B., New York City.
William Francis Gallaway, Ph. D., Classical Instructor, Savannah, Ga.
Ross Granville Harrison, Ph. D., Instructor in Anatomy (J. H. U.).
Bert Holmes Hite, M. S., Chemist, Agric. Experiment Station of W. Va.—[1893–95].
Samuel Verplanck Hoffman, M. E., Fellow by Courtesy (J. H. U.).
Jacob H. Hollander, Ph. D., Associate in Economics (J. H. U.).
Charles William Leverett Johnson, Ph. D., Fellow by Courtesy (J. H. U.).
George Wesley Johnston, Ph. D., Lecturer in Latin, Univ. of Toronto.
George Charles Keidel, Ph. D., Assistant in Romance Languages (J. H. U.).—[1893–95].
Edward Bennett Mathews, Ph. D., Associate in Mineralogy (J. H. U.).
Edwin Fitch Northrup, Ph. D., Associate Professor of Physics, Univ. of Texas.—[1893–95].
Alfred William Stratton, Ph. D., Instructor in Sanskrit, Univ. of Chicago.—[1893–95].
Frederick Henry Sykes, Ph. D., Professor of English, Western Univ., London, Ont.
George Francis Weida, Ph. D., Professor of Chemistry, Baker Univ., Kan.

1894.

Arthur Fisher Bentley, Ph. D., Lecturer in Economics, Univ. of Chicago.
Samuel Walker Beyer, Ph. D., Associate Professor of Geology, Iowa Agric. Coll.
Clarence Griffin Child, Ph. D., Assistant Editor, Worcester's Dictionary; Univ. Extension Lecturer, Philadelphia.
Frank Hollinger Clutz, A. B., Fellow by Courtesy (J. H. U.).—[1894-96].
Fonger DeHaan, Ph. D., Associate in Romance Languages (J. H. U.). *Did not enter on the fellowship.*
Henry Stewart Gane, Ph. D., U. S. Geological Survey, Washington.
William August Haussmann, Ph. D., Instructor in German, Burlington, N. J.
Reid Hunt, Ph. D., Tutor in Physiology, Columbia Coll.—[1894–96].
Thomas Franklin Kane, Ph. D., Professor of Latin, Olivet Coll.
William Hamilton Kirk, Ph. D., Instructor in Latin, Vanderbilt Univ.
Henry McElderry Knower, Ph. D., Instructor in Biology, Williams Coll.
George Lefevre, Ph. D., Bruce Fellow (J. H. U.).
Caspar Levias, A. B., Professor of Exegesis and Hebrew Grammar, Hebrew Union Coll., Cincinnati. *Reappointed* 1895, *but resigned.*
William Henry Maltbie, Ph. D., Associate Professor of Mathematics, Woman's Coll., Baltimore.
Thomas Francis Moran, Ph. D., Professor of History and Economics, Purdue Univ.
Louis Trenchard More, Ph. D., Demonstrator of Physics, Univ. of Neb.
James Flack Norris, Ph. D., Assistant in Chemistry, Mass. Inst. of Tech.
Herbert Dodge Pease, M. B., Bacteriologist, Board of Health, Philadelphia.

1895.

Norman Ross Carmichael, A. M., Assistant in Mathematics, Queen's Univ., Canada.
Arthur Douglas Chambers, Ph. D., Chemist, Lima, O.

Franklin Story Conant, A. B., Fellow by Courtesy (J. H. U.).
Rev. Eneas Bernard Goodwin, A. B., Clergyman, Chicago, Ill.
William Jackson Humphreys, A. B., Fellow by Courtesy (J. H. U.).
Oliver Martin Johnston, Ph. D., Lecturer in Old French Philology, Bryn Mawr.
Gordon Jennings Laing, Ph. D., Fellow, American School of Classical Studies, Rome.
Louis Eugene Livingood, M. D., Assistant in Pathology (J. H. U.).
Ebenezer Mackay, Ph. D., Instructor in Chemistry, Dalhousie Univ.
John McLaren McBryde, Jr., A. B., Fellow by Courtesy (J. H. U.).
Henry Ludwell Moore, Ph. D., Instructor in Economics (J. H. U.).
Charles William Peppler, A. B., Fellow by Courtesy (J. H. U.).
Franklin Lafayette Riley, Ph. D., President of Hillman Coll., Miss.
Frederick George Gottlob Schmidt, Ph. D., Acting Professor of German, Cornell Coll., Iowa.
John Adams Scott, A. B., Instructor in Greek, Academy of Northwestern Univ.
George Otis Smith, Ph. D., U. S. Geological Survey, Washington.
M. Victor Staley, Ph. D., Professor of Latin, Manzanita Hall, Palo Alto, Cal.
Thomas Hardy Taliaferro, Ph. D., Instructor in Mathematics, Pennsylvania State Coll.

The list of the present holders of Fellowships is given on page 12.
The whole number of Fellows appointed in twenty-one years is 344.

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7. Doctors of Philosophy.

(When the institution is not named, the Johns Hopkins University is to be understood. (F) indicates that the person has held a Fellowship here. *—Died.)

1878.

Henry Carter Adams, (F), A. B., Iowa, 1874, Instructor, 1879–81, Lecturer, 1892–94, Lecturer and Associate Professor, Cornell, 1879–87.—Professor of Political Economy, etc., Univ. of Mich.; Statistician, Interstate Commerce Commission.

Thomas Craig, (F), C. E., Lafayette, 1875, U. S. Coast Survey, 1879–81, Instructor, Associate, and Associate Professor, 1879–92.—Professor of Pure Mathematics.

Josiah Royce, (F), A.B., Univ. of Cal., 1875, Assistant Professor, Univ. of Cal., 1878–82.—Professor of Philosophy, Harvard.

Ernest Gottlieb Sihler, (F), Concordia, 1869, Professor, Concordia Coll., Milwaukee, 1891–92.—Professor of Latin, N. Y. Univ. (4)

1879.

Maurice Bloomfield, (F), A. M., Furman, 1877, LL. D., Princeton, 1896, Associate and Associate Professor, 1881–91.—Professor of Sanskrit and Comparative Philology.

Samuel Fessenden Clarke, (F), Ph. B., Yale, 1878, Assistant, 1879–81.—Professor of Natural History, Williams Coll.

George Bruce Halsted, (F), A. B., Princeton, 1875, Tutor and Instructor, Princeton, 1878–84.—Professor of Mathematics, Univ. of Texas.

Edward Hart, (F), S. B., Lafayette, 1874.—Professor of Analytical Chemistry, Lafayette Coll.

William White Jacques, (F), S. B., Mass. Inst. of Tech., 1876, and Lecturer in the Inst., 1885–91.—Electrician, Boston, Mass.

Henry Sewall, (F), S. B., Wesleyan, 1876. Hon. M. D., Univ. of Mich., 1888, M. D., Univ. of Colorado, 1889, Associate in Biology, 1880–82, Professor, Univ. of Mich., 1882–89.—Professor of Physiology, Univ. of Denver. (6)

1880.

Francis Greenleaf Allinson, (F), A. B., Haverford, 1876, A. B., Harvard, 1877, Assistant Professor, Haverford, 1880–82, Associate Professor, Williams, 1892–95.—Associate Professor of Greek Literature and History, Brown Univ.

Fabian Franklin, (F), Ph. B., Columbian, 1869, Assistant, Associate, Associate Professor, and Professor of Mathematics, 1879–95.—Editor of *The Baltimore News.*

Edwin Herbert Hall, (F), A. B., Bowdoin, 1875, Assistant, 1880–81, Instructor and Assistant Professor, Harvard, 1881–95.—Professor of Physics, Harvard.

Allan Marquand, (F), A. B., Princeton, 1874, L. H. D., Hobart, 1888.—Professor of Archæology, etc., Princeton.

Washington Irving Stringham, (F), A. B., Harvard, 1877.—Professor of Mathematics, Univ. of Cal. (5)

1881.

Louis Bevier, (F), A. B., Rutgers, 1878, Instructor and Adjunct Professor, Rutgers, 1881–92.—Professor of Greek, Rutgers.

Robert Dorsey Coale, (F), Assistant, 1881–83.—Professor of Chemistry, and Dean of the Medical Faculty, Univ. of Md.

Edward Allen Fay, A. B., Univ. of Mich., 1862.—Vice-President and Professor of Languages, National Deaf-Mute Coll.

Lawrence Bunting Fletcher, (F), A. B., Columbia, 1877, Instructor in Physics, Wesleyan, 1882–83.—Marlboro, N. Y.

Samuel Garner, A. B., St. John's, 1871, Professor, Univ. of Indiana, 1881–87.—Professor of Modern Languages, U. S. Naval Academy.

Edward Mussey Hartwell, (F), A. B., Amherst, 1873, M. D., Miami Med. Coll., 1882, Instructor and Associate, 1883–91.—Director of Physical Training in the Boston Public Schools.

William Thomson Sedgwick, (F), Ph. B., Yale, 1877, Assistant and Associate, 1880–83.—Professor of Biology, Mass. Inst. of Tech.; Biologist, Mass. Board of Health; Curator, Lowell Inst., Boston.

Christian Sihler, (F), Concordia, 1866, M. D., Univ. of Mich., 1871, Assistant, 1879–80, Instructor and Acting Professor, Western Reserve, 1889–94.—Physician, Cleveland, O.

Edmund Beecher Wilson, (F), Ph. B., Yale, 1878, Assistant, 1881–82, Lecturer, Williams, 1883–84, Associate Professor and Professor, Bryn Mawr, 1885–91.—Professor of Invertebrate Zoölogy, Columbia. (9)

1882.

James Wilson Bright, (F), A. B., Lafayette, 1877, Assistant, 1882–83, Instructor, Associate, and Associate Professor, 1885–92, Instructor, Cornell, 1885.—Professor of English Philology.

John Franklin Jameson, (F), A. B., Amherst, 1879, Assistant and Associate, 1882–88, Lecturer, 1890–91.—Professor of History, Brown Univ.

Mitsuru Kuhara, (F), S. B., Univ. of Tokio, 1877, Lecturer, Univ. of Tokio, 1882–87.—Professor of Chemistry, First Middle School of Tokio, Japan.

Robert Wright Mahon, C. E., Lehigh, 1876, Tutor, Lafayette, 1882–83, Acting Professor, Rose Polytech. Inst., 1888–89.

*Oscar Howard Mitchell, (F), A. B., Marietta, 1875, Professor of Mathematics, Marietta Coll., 1882–89. * *March* 29, 1889.

George Frederick Nicolassen, (F), A. B., Univ. of Virginia, 1879, Assistant, 1881–82.—Professor of Greek and German, Southwestern Presbyterian Univ., Tenn.

William Albert Noyes, A. B., Iowa, 1879, Instructor, Univ. of Minn., 1882–83, Professor, Univ. of Tenn., 1883–86.—Professor of Chemistry, Rose Polytechnic Inst.

Chase Palmer, (F), A. B., 1879, Assistant, Mass. Inst. of Tech., 1882–83, Professor, Mass. Normal School, Salem, 1883–87, Assistant, Tufts Coll., 1887–88, Professor, Wabash Coll., 1888–90.—Professor of Chemistry, Manual Training High School, Louisville, Ky.

Edward Henry Spieker, (F), A. B., 1879, Instructor and Associate, 1883–88.—Associate Professor of Greek and Latin. (9)

1883.

William John Alexander, (F), A. B., London, 1876, Professor, Dalhousie, 1883–89.—Professor of English, Univ. of Toronto.

William Cathcart Day, (F), A. B., 1880, Professor, St. John's Coll., 1883–84, and Univ. of Nashville, 1884–87.—Professor of Chemistry, Swarthmore Coll.

William Pitt Durfee, (F), A. B., Univ. of Mich., 1876.—Professor of Mathematics, Hobart Coll.

Kakichi Mitsukuri, (F), Ph. B., Yale, 1879.—Professor of Zoölogy, Univ. of Tokio.

George Stetson Ely, (F), A. B., Amherst, 1878, Professor of Mathematics, Buchtel, 1883–84.—Examiner, U. S. Patent Office.

Bernard Francis O'Connor, (F), B. ès Lett., Univ. of France, 1874, Instructor and Adjunct Professor of Romance Languages, Columbia, 1883–91.—New York City.

(6)

1884.

Herbert William Conn, A. B., Boston Univ., 1881, Assistant, 1883–84.—Professor of Biology, Wesleyan Univ., Conn.

Ellery William Davis, (F), S. B., Univ. of Wis., 1879, Professor, Florida Agric. Coll., 1884–88, and Univ. of S. C., 1888–93.—Professor of Mathematics, Univ. of Neb.

David Talbot Day, (F), A. B., 1881.—U. S. Geol. Survey, Washington.

John Dewey, (F), A. B., Univ. of Vt., 1879, Instructor and Professor, Univ. of Mich., 1884–94.—Professor of Philosophy, Univ. of Chicago.

*James Reynolds Duggan, (F), A. B., Mercer, 1877, M. D., Jefferson Med. Coll., 1879, Professor of Chemistry, Wake Forest Coll., 1886–88. **January* 10, 1888.

William Henry Howell, (F), A. B., 1881, M. D., Univ. of Mich., 1890, Assistant, Associate, and Associate Professor, 1884–89, Lecturer and Professor, Univ. of Mich., 1889–92, Associate Professor, Harvard, 1892–93.—Professor of Physiology.

Hans Carl Günther von Jagemann, (F), Naumburg Gymnas., 1876, Professor, Earlham, 1884–85, and Indiana Univ., 1885–89.—Assistant Professor of German, Harvard.

Edward Harrison Keiser, (F), S. B., Swarthmore, 1880, Assistant, 1884–85.—Professor of Chemistry, Bryn Mawr Coll.

Arthur Lalanne Kimball, (F), A. B., Princeton, 1891, Associate and Associate Professor, 1884–91.—Professor of Physics, Amherst Coll.

Henry Leslie Osborn, (F), A. B., Wesleyan, 1878, Professor, Purdue Univ., 1884–87.—Professor of Biology and Geology, Hamline Univ.

Charles Albert Perkins, (F), A. B., Williams, 1879, Assistant, 1884–87, Associate, Bryn Mawr, 1887–91, Professor, Hampden Sidney, 1891–92.—Professor of Physics, etc., Univ. of Tenn.

Albert Shaw, A. B., Iowa, 1879, Reader, 1889–90, Lecturer, 1891–92.—American Editor, *The Review of Reviews*, New York.

Henry Newlin Stokes, (F), S. B., Haverford, 1879, Assistant Professor of Chemistry, Univ. of Chicago, 1893–94.—U. S. Geological Survey, Washington, D. C.

Lewis Webb Wilhelm, (F), A. B., 1880.—Mathematical Instructor, Baltimore.

Arthur Yager, A. B., Georgetown, Ky., 1879.—Professor of History, Georgetown Coll., Ky.

(15)

1885.

Edward Webster Bemis, A. B., Amherst, 1880, Instructor, Amherst, 1885–86, Adjunct Professor, Vanderbilt, 1886–92, Associate Professor, Univ. of Chicago, 1892–95.—Associate Editor, *Bibliotheca Sacra*, Oberlin, O.

Gustav Bissing, (F), A. B., 1882.—Principal Examiner, Division A, U. S. Patent Office.

Henry Herbert Donaldson, (F), A. B., Yale, 1879, Assistant, 1883–84, Instructor and Associate, 1885–89, Assistant Professor, Clark Univ., 1889–92.—Professor of Comparative Neurology, Univ. of Chicago.

Louis Duncan, U. S. Naval Academy, 1880, Associate, 1886–89.—Associate Professor of Electricity.

Homer Winthrop Hillyer, (F), S. B., Univ. of Wis., 1882, Instructor, Univ. of Wis., 1885–90.—Assistant Professor of Organic Chemistry, Univ. of Wisconsin.

Frederic Schiller Lee, (F), A. B., St. Lawrence Univ., 1878, Instructor, St. Lawrence, 1886–87, Associate Bryn Mawr, 1887–91.—Adjunct Professor and Demonstrator of Physiology, Columbia Coll.

*Gustav Adolph Liebig, Jr., (F), A. B., 1882, Assistant, 1887–90. **February* 10, 1897.

James Playfair McMurrich, A. B., Toronto, 1879, Instructor, 1884–86, Professor, Haverford, 1886–89, Instructor, Clark, 1889–91, Professor, Univ. of Cincinnati, 1891–94.—Professor of Anatomy, Univ. of Mich.

Albert Gallatin Palmer, (F), A. B., 1882, Assistant and Assistant Professor, Swarthmore, 1885–87.—Chemist, Baltimore.

Harry Fielding Reid, (F), A. B., 1880, Assistant, 1882–84, Lecturer, 1894–96, Professor, Case School, 1886–94, Associate Professor, Univ. of Chicago, 1895–96.—Associate Professor of Geological Physics.

Henry Alford Short, A. B., Columbia, 1880, Tutor, Columbia, 1885-88.—New York.

Morrison Isaac Swift, (F), A. B., Williams, 1879, Instructor in Philosophy, Hobart Coll., 1882-84.

Henry Alfred Todd, A. B., Princeton, 1876, Instructor and Associate, 1883-91, Professor, Stanford Univ., 1891-93.—Professor of Romance Philol., Columbia. (13)

1886.

William Shirley Bayley, (F), A. B., 1883.—U. S. Geological Survey; Professor of Geology and Mineralogy, Colby Univ.

* Adam Todd Bruce, (F), A. B., Princeton, 1881, Instructor in Osteology, etc., 1886-87. * *February* 9, 1887.

Davis Rich Dewey, (F), A. B., Univ. of Vt., 1879, Lecturer, 1895-96.—Instructor (1886-88) and (now) Professor of Economics, etc., Mass. Institute of Technology.

William Henry Emerson, (F), U. S. Naval Acad., 1880, Professor, S. C. Military Acad., 1886-88.—Professor of Chemistry, Georgia School of Technology, Atlanta.

Joseph Auguste Fontaine, College of Sion, Nancy, France, 1879, Instructor, Univ. of Neb., 1887-89, Professor, Univ. of Miss., 1889-91.—Professor of Romance Languages, Bryn Mawr.

Elgin Ralston Lovell Gould, (F), A. B., Victoria (Ont.), 1881, Instructor, Washington (D. C.) High School, 1884-87, Reader, 1887-89, Professor, Univ. of Chicago, 1895-96.—President, City and Suburban Homes Company, New York; Lecturer in Social Economics.

William Penn Holcomb, B. L., Swarthmore, 1878, Professor of History, etc., Swarthmore, 1886-94.—Pearl River, N. Y.

Joseph Jastrow, (F), A. B., Univ. of Pa., 1882.—Professor of Experimental Psychology, Univ. of Wisconsin.

George Theophilus Kemp, (F), A. B., 1883, M. D., Long Island Med. Coll., 1891, Demonstrator, Univ. of Pa., 1886-87, Associate and Associate Director, etc., Hoagland Lab., 1888-93.—Fellow by Courtesy.

Charles Herbert Levermore, (F), A. B., Yale, 1879, Instructor, Univ. of Cal., 1886-88, Professor of History, Mass. Inst. of Tech., 1888-93.—Principal, Adelphi College, Brooklyn.

Gonzalez Lodge, (F), A. B., 1883, Professor, Davidson Coll., 1886-88.—Professor of Latin, Bryn Mawr College.

Charles William Emil Miller, (F), A. B., 1882, Professor, Peoria (Ill.) High School, 1888-90, and Walther Coll., St. Louis, 1890-91.—Associate in Greek.

Henry Barber Nixon, (F), Univ. of N. C., 1878.—Professor of Mathematics, Pennsylvania Coll.

Charles Skeele Palmer, (F), A. B., Amherst, 1879.—Professor of Chemistry, Univ. of Colo.

Burr James Ramage, A. B., Newberry, 1880.—Professor of Common Law, and Dean of the Law School, Univ. of the South.

Shosuke Sato, S. B., Sapporo Agric. Coll., 1880.—Acting Director and Professor of Agricultural Economics, Imperial Coll. of Agriculture, Sapporo, Japan.

Woodrow Wilson, (F), A. B., Princeton, 1876, LL. D., Wake Forest, 1887, Associate and Associate Professor, Bryn Mawr, 1885-88, Professor, Wesleyan Univ., 1888-90.—Professor of Jurisprudence and Political Economy, Princeton; Lecturer in Constitutional Law, New York Law School; Lecturer in Local Government. (17)

1887.

Cyrus Adler, (F), A. B., Univ. of Pa., 1883, Instructor, 1887-90, Associate, 1890-93.—Librarian of the Smithsonian Institution; Professor of Oriental History and Archæology, Columbian Univ.

Ethan Allen Andrews, (F), Ph. B., Yale, 1881, Instructor and Associate, 1887-92.—Associate Professor of Biology.

Rev. Albert Clayton Applegarth, A. B., 1884.—Clergyman, Chester, Pa.

* David Barcroft, (F), Ph. B., Univ. of Cal., 1882. * *August* 2, 1894.

Henry Gustav Beyer, M. D., Bellevue Hospital Med. Coll., 1876, M. R. C. S. (London), Director of Physical Training, U. S. Naval Academy, 1891-95.—Surgeon, U. S. N.

Richard Newman Brackett, A.B., Davidson, 1883.—Associate Professor of Chemistry, Clemson Agric. Coll., S. C.

Henry Crew, (F), A. B., Princeton, 1883, Assistant, 1887-88, Instructor, Haverford, 1888-91.—Professor of Physics, Northwestern Univ.

George Peter Dreyer, (F), A. B., 1887, Demonstrator, 1890-92.—Associate in Biology.

Edwin Whitfield Fay, (F), A. M., Southwestern Presbyterian Univ., 1883, Instructor, Univ. of Mich., 1890-91, Acting Professor, Univ. of Texas, 1892-93.—Professor of Latin, Washington and Lee.

Henry Torsey Fernald, S. B., Maine State Coll., 1885.—Professor of Zoölogy, Pa. State Coll.

Henry Brayton Gardner, (F), A. B., Brown, 1884.—Associate Professor of Political Economy, Brown Univ.

Charles Jaques Goodwin, (F), A. B., Bowdoin, 1887, Professor, Cornell Coll., 1890-92, Tutor, Wesleyan Univ., 1892-95.—Fellow by Courtesy.

Charles Homer Haskins, A. B., 1887, Instructor, 1889-90.—Professor of Institutional History, Univ. of Wisconsin.

James Taft Hatfield, (F), A. B., Northwestern, 1883.—Professor of German, Northwestern Univ.

John Cohn Hemmeter, M. D., Univ. of Md., 1883.—Clinical Professor of Medicine, Balt. Medical Coll.; Physician, Balt.

Charles Holmes Herty, Ph. B., Univ. of Ga., 1886.—Adjunct Professor of Chemistry, Univ. of Ga.

Jesse Herman Holmes, A. B., Univ. of Neb., 1884.—Instructor in Chemistry and Physics, Newtown, Pa.

Abel Henry Huizinga, (F), A. B., Hope Coll., 1880.—Adjunct Professor of Old Testament Literature, etc., McCormick Theol. Sem., Chicago.

Toyokichi Iyenaga, Ph. B., Oberlin, 1887.—Professor of Political Science, Semmo Gakko, Tokio.

Thomas Logie, (F), A. B., Toronto, 1887, Assistant Professor, Williams Coll., 1890-93.—Associate Professor of Romance Languages, Rutgers Coll.

Hiram Benjamin Loomis, (F), A. B., Trinity (Conn.), 1885, Instructor, Univ. of Wis., 1890-93.—Assistant Professor of Physics, Northwestern Univ.

Herbert William Magoun, (F), A. B., Iowa, 1879, Acting Professor, Colo. Coll., 1890-91, Acting Professor, Oberlin, 1892-95.—Oberlin, O.

John Hanson Thomas McPherson, (F), A. B., 1886, Instructor, Univ. of Mich., 1890-91.—Professor of History, Univ. of Ga.

Wilmot Vernon Metcalf, A. B., Oberlin, 1883.—Professor of Chemistry and Physics, Carleton Coll.

Thomas Hunt Morgan, (F), S. B., Ky. State Coll., 1886, Bruce Fellow, 1890-91.—Professor of Biology, Bryn Mawr.

Augustus Taber Murray, (F), A. B., Haverford, 1885, Professor, Earlham Coll., 1888-91, and Colorado Coll., 1891-92.—Professor of Greek, Stanford Univ.

Wyatt William Randall, A. B., St. John's, 1884.—Associate in Chemistry.

George Mann Richardson, (F), A. C., Lehigh, 1886, Instructor, Lehigh, 1890-91.—Professor of Organic Chemistry, Leland Stanford Jr. Univ.

Joseph Samuel Shefloe, (F), A. B., Luther, 1885.—Professor of Romance Languages, Woman's College of Baltimore.

Robert Benson Steele, (F), A. B., Univ. of Wis., 1883, Professor, St. Olaf Coll., 1890-91.—Professor of Latin, Illinois Wesleyan Univ.

Andrew Stephenson, A. B., De Pauw, 1882, Associate Professor, Wesleyan, 1890-94.—Professor of History, De Pauw Univ.

Frederick Jackson Turner, A. B., Univ. of Wis., 1884.—Professor of American History, Univ. of Wisconsin.

John Martin Vincent, A. B., Oberlin, 1883, Instructor and Associate, 1890-95.—Associate Professor of History.

Shozaburo Watase, (F), S.B., Sapporo Agric. Coll., 1884, Bruce Fellow, 1889-90, Lecturer and Assistant, Clark Univ., 1890-92.—Assistant Professor of Cellular Biology, Univ. of Chicago.

James Albert Woodburn, (F), A. B., Indiana Univ., 1876.—Professor of American History, Indiana Univ. (33)

1891.

Alfred Bagby, Jr., A. B., Richmond, 1885, Adjunct Professor, S. C. Univ., 1891-93.—Attorney at Law, Baltimore.

James William Black, A. B., 1888, Acting Professor, Georgetown Coll., Ky., 1891-92, Associate Professor, Oberlin, 1892-94.—Professor of History, etc., Colby Univ.

Charles Pliny Brigham, A. B., 1888.—Greenport, Long Island.

Charles Edward Coates, Jr., A. B., 1887, Professor, St. John's, Md., 1891-93.—Professor of Chemistry, La. State Univ.

George Thomas White Patrick, (F), A. B., Iowa State Univ., 1878, B. D., Yale, 1885. —Professor of Philosophy, Iowa State Univ.

Edmund Clark Sanford, (F), A. B., Univ. of Cal., 1883, Instructor, 1888–89.—Assistant Professor of Psychology, Clark Univ.

Henry Taber, Ph. B., Yale, 1883, Assistant, 1888–89.—Assistant Professor of Mathematics, Clark Univ.

Amos Griswold Warner, (F), B. L., Univ. of Neb., 1885, General Agent, Charity Organization Society, Balt., 1887–89, Professor, Univ. of Neb., 1889–91, Superintendent of Charities in the District of Columbia, 1891–93, Lecturer, 1892–93.—Professor of Economics, Stanford Univ.

John Roaf Wightman, (F), A. B., Toronto, 1871, Professor, Iowa Coll., 1889–91, Associate Professor, Univ. of Neb., 1891–93.—Professor of Romance Lang., Oberlin.

Henry Van Peters Wilson, (F), A. B., 1883, Bruce Fellow, 1888–89.—Professor of Biology, Univ. of N. C.

Thomas Kimber Worthington. A. B., Haverford, 1883, LL. B., Univ. of Md., 1890.—Attorney at Law, Baltimore. (37)

1889.

Charles McLean Andrews, (F), A. B., Trinity (Conn.), 1884.—Associate Professor of History, Bryn Mawr Coll.

Frank Wilson Blackmar, (F), Ph. B., Univ. of the Pacific, 1881.—Professor of History and Sociology, Univ. of Kansas.

Jeffrey Richardson Brackett, A. B., Harvard, 1883.—Baltimore.

William Merriam Burton, (F), A. B., Adelbert, 1886.—Superintendent, Standard Oil Company, Whiting, Ind.

Morgan Callaway, Jr., (F), A. B., Emory (Ga.), 1881, Professor, Southwestern Univ., 1889–90.—Associate Professor of English, Univ. of Texas.

Alfred Robert Louis Dohme, A. B., 1886.—Chemist, Baltimore.

*William Curns Lawrence Gorton, (F), A. B., 1886, Associate Professor and Professor of Mathematics, Woman's Coll., Balt., 1888–94. **November* 8, 1894.

Joseph Edward Harry, (F), A. B., 1886.—Professor of Greek and German, Georgetown Coll., Ky.

George Allison Hench, (F), A. B., Lafayette, 1885.—Professor of German, Univ. of Mich.

Clifton Fremont Hodge, (F), A. B., Ripon, 1882, Instructor, Univ. of Wis., 1891–92.—Assistant Professor of Physiology and Neurology, Clark Univ.

Cary Talcott Hutchinson, (F), Ph. B., Washington Univ., 1886.—Electrician, N. Y.

James Thomas Lees, A. B., Adelbert, 1886. —Professor of Greek, Univ. of Neb.

Archibald MacMechan, (F), A. B., Toronto, 1884.—Professor of English, Dalhousie Univ.

Charles William Moulton, A. B., Univ. of Minn., 1885.—Professor of Chemistry, Vassar Coll.

Albion Woodbury Small, A. B., Colby, 1876, Reader, 1888–89, President of Colby Univ., 1889–92.—Professor of Social Science, Univ. of Chicago.

Charles Lee Smith, (F), S. B., Wake Forest, 1884, Instructor, 1889–91, General Secretary, Charity Organization Society of Baltimore, 1889–91.—Professor of History, William Jewell Coll., Mo.

Kirby Flower Smith, A. B., Univ. of Vt., 1884, Instructor and Associate, 1889–93.—Associate Professor of Latin.

Rev. Lemon Leander Uhl, A. B., Wittenberg (Ohio), 1881, and D. D., 1893.—Missionary in British India.

Arthur Clarence Wightman, (F), A. B., Wofford, 1879, Demonstrator, 1889–90, Professor in Md. Agric. Coll., 1890–91.—Adjunct Professor of Biology and Physics, Randolph Macon Coll.

William Klapp Williams, A. B., 1886.—California. (20)

1890.

Joseph Sweetman Ames, (F), A. B., 1886, Assistant and Associate, 1889–93.—Associate Professor of Physics.

Edward Carey Applegarth, (F), A. B., 1887, M. D., Coll. of Phys. and Surg., Balt., 1892.—Physician, Balt.

Charles Cotton Blackshear, A. B., Mercer, 1881, Instructor, Bryn Mawr, 1890–91.—Associate Professor of Chemistry, Woman's Coll., Balt.

Charles Hiram Chapman, (F), A. B., 1888, Instructor and Associate, 1889–92.—President, Univ. of Oregon.

Rudolf John Julius de Roode, Jr., (F), S.B., Ky. State Coll., 1885.—Analytical Chemist, New York City.

George Peter Dreyer, (F), A. B., 1887, Demonstrator, 1890-92.—Associate in Biology.

Edwin Whitfield Fay, (F), A. M., Southwestern Presbyterian Univ., 1883, Instructor, Univ. of Mich., 1890-91, Acting Professor, Univ. of Texas, 1892-93.—Professor of Latin, Washington and Lee.

Henry Torsey Fernald, S. B., Maine State Coll., 1885.—Professor of Zoölogy, Pa. State Coll.

Henry Brayton Gardner, (F), A. B., Brown, 1884.—Associate Professor of Political Economy, Brown Univ.

Charles Jaques Goodwin, (F), A. B., Bowdoin, 1887, Professor, Cornell Coll., 1890-92, Tutor, Wesleyan Univ., 1892-95.—Fellow by Courtesy.

Charles Homer Haskins, A. B., 1887, Instructor, 1889-90.—Professor of Institutional History, Univ. of Wisconsin.

James Taft Hatfield, (F), A. B., Northwestern, 1883.—Professor of German, Northwestern Univ.

John Cohn Hemmeter, M. D., Univ. of Md., 1883.—Clinical Professor of Medicine, Balt. Medical Coll.; Physician, Balt.

Charles Holmes Herty, Ph. B., Univ. of Ga., 1886.—Adjunct Professor of Chemistry, Univ. of Ga.

Jesse Herman Holmes, A. B., Univ. of Neb., 1884.—Instructor in Chemistry and Physics, Newtown, Pa.

Abel Henry Huizinga, (F), A. B., Hope Coll., 1890.—Adjunct Professor of Old Testament Literature, etc., McCormick Theol. Sem., Chicago.

Toyokichi Iyenaga, Ph. B., Oberlin, 1887.—Professor of Political Science, Semmo Gakko, Tokio.

Thomas Logie, (F), A. B., Toronto, 1887, Assistant Professor, Williams Coll., 1890-93.—Associate Professor of Romance Languages, Rutgers Coll.

Hiram Benjamin Loomis, (F), A. B., Trinity (Conn.), 1885, Instructor, Univ. of Wis., 1890-93.—Assistant Professor of Physics, Northwestern Univ.

Herbert William Magoun, (F), A. B., Iowa, 1879, Acting Professor, Colo. Coll., 1890-91, Acting Professor, Oberlin, 1892-95.—Oberlin, O.

John Hanson Thomas McPherson, (F), A. B., 1886, Instructor, Univ. of Mich., 1890-91.—Professor of History, Univ. of Ga.

Wilmot Vernon Metcalf, A. B., Oberlin, 1883.—Professor of Chemistry and Physics, Carleton Coll.

Thomas Hunt Morgan, (F), S. B., Ky. State Coll., 1886, Bruce Fellow, 1890-91.—Professor of Biology, Bryn Mawr.

Augustus Taber Murray, (F), A. B., Haverford, 1885, Professor, Earlham Coll., 1888-91, and Colorado Coll., 1891-92.—Professor of Greek, Stanford Univ.

Wyatt William Randall, A. B., St. John's, 1884.—Associate in Chemistry.

George Mann Richardson, (F), A. C., Lehigh, 1886, Instructor, Lehigh, 1890-91.—Professor of Organic Chemistry, Leland Stanford Jr. Univ.

Joseph Samuel Shefloe, (F), A. B., Luther, 1885.—Professor of Romance Languages, Woman's College of Baltimore.

Robert Benson Steele, (F), A. B., Univ. of Wis., 1883, Professor, St. Olaf Coll., 1890-91.—Professor of Latin, Illinois Wesleyan Univ.

Andrew Stephenson, A. B., De Pauw, 1882, Associate Professor, Wesleyan, 1890-94.—Professor of History, De Pauw Univ.

Frederick Jackson Turner, A. B., Univ. of Wis., 1884.—Professor of American History, Univ. of Wisconsin.

John Martin Vincent, A. B., Oberlin, 1883, Instructor and Associate, 1890-95.—Associate Professor of History.

Shozaburo Watase, (F), S.B., Sapporo Agric. Coll., 1884, Bruce Fellow, 1889-90, Lecturer and Assistant, Clark Univ., 1890-92.—Assistant Professor of Cellular Biology, Univ. of Chicago.

James Albert Woodburn, (F), A. B., Indiana Univ., 1876.—Professor of American History, Indiana Univ. (33)

1891.

Alfred Bagby, Jr., A. B., Richmond, 1885, Adjunct Professor, S. C. Univ., 1891-93.—Attorney at Law, Baltimore.

James William Black, A. B., 1888, Acting Professor, Georgetown Coll., Ky., 1891-92, Associate Professor, Oberlin, 1892-94.—Professor of History, etc., Colby Univ.

Charles Pliny Brigham, A. B., 1888.—Greenport, Long Island.

Charles Edward Coates, Jr., A. B., 1887, Professor, St. John's, Md., 1891-93.—Professor of Chemistry, La. State Univ.

Edwin Grant Conklin, (F), S. B., Ohio Wesleyan, 1885, Professor, Ohio Wesleyan, 1891-94, and Northwestern Univ., 1894-95.—Professor of Comparative Embryology, Univ. of Pa.

Paul Joseph Dashiell, A.B., 1887, Instructor, Lehigh, 1889-90, 1891-92.—Professor of Chemistry, U. S. Naval Academy.

Hermann Louis Ebeling, (F), A. B., 1882.—Professor of Greek, Miami Univ.

William Snyder Eichelberger, (F), A. B., 1886, Instructor in Mathematics, etc., Wesleyan Univ., 1891-96.—U. S. Nautical Almanac, Washington.

Thomas Perrin Harrison, (F), S. C. Military Acad., 1886, Associate Professor, Clemson Agric. Coll., 1891-95.—Professor of English, Davidson.

Walter Jones, A. B., 1888, Acting Professor, Wittenberg Coll., 1891-92, Instructor and Professor, Purdue Univ., 1892-95.—Assistant in Physiological Chemistry.

Henry Parker Manning, (F), A. B., Brown, 1883.—Assistant Professor of Pure Mathematics, Brown Univ.

George Frederick Metzler, A. B., Albert Coll., 1880, Instructor, Univ. of Mich., 1892-93, and Queen's Univ., Ont., 1895-96.—Odessa, Ont.

William McCracken Milroy, A. B., Geneva Coll., 1877.—Professor of Latin, Geneva College, Pa.

John Leverett Moore, (F), A. B., Princeton, 1881, Tutor, Princeton, 1882-85, Instructor, 1888-89.—Professor of Latin, Vassar Coll.

Wilfred Pirt Mustard, (F), A. B., Toronto, 1886, Professor, Colorado Coll., 1891-93.—Professor of Latin, Haverford College.

Barker Newhall, (F), A. B., Haverford, 1887, Instructor, Brown Univ., 1892-95, and Bates Coll. (Me.), 1895-96.—Classical Instructor, Monson, Mass.

George Petrie, A. M., Univ. of Virginia, 1887.—Professor of History, Alabama Polytechnic Institute.

Edward Bennett Rosa, (F), S. B., Wesleyan, Conn., 1886.—Professor of Physics, Wesleyan University.

Edward Alsworth Ross, A. B., Coe Coll., 1886, Professor, Indiana Univ., 1891-92, Associate Professor, Cornell, 1892-93.—Professor of Economic Theory and Finance, Leland Stanford Jr. University.

Charles Edward Saunders, (F), A. B., Toronto, 1888, Professor, Central Univ., Ky., 1891-93.—Ottawa, Canada.

Sidney Sherwood, A. B., Princeton, 1879, Instructor, Univ. of Pa., 1891-92, Associate, 1892-95.—Associate Professor of Political Economy.

Moses Slaughter, (F), A. B., Indiana Asbury Univ., 1883, Instructor, Bryn Mawr, 1887-88.—Professor of Latin, Iowa College.

Bernard Christian Steiner, (F), A. B., Yale, 1888, LL. B., Univ. of Maryland, 1894, Instructor, Williams, 1891-92.—Librarian, Enoch Pratt Free Library, Baltimore; Associate in History.

William Howe Tolman, A. B., Brown, 1882.—General Agent, Poor Association, N. Y.

Stephen Beauregard Weeks, A. B., Univ. of N. C., 1886, Professor, Trinity Coll., N. C., 1891-93.—Editor, Bureau of Education, Washington.

John White, Jr., (F), A. B., 1888, Assistant, Cornell, 1891-93.—Instructor in Chemistry, Univ. of Neb.

Westel Woodbury Willoughby, (F), A. B., 1888, Acting Assistant Professor, Stanford Univ., 1894-95.—Attorney at Law, Washington; Associate in Political Science.

Arthur Burnham Woodford, Ph. B., Yale, 1881, Instructor, Univ. of Pa., 1891-92.—Professor, Coll. of Social Economics, New York; Lecturer, New York Univ. (23)

1892.

Eugene Thomas Allen, A. B., Amherst, 1887, Acting Professor, Univ. of Colo., 1892-93, Assistant, Harvard, 1894-95.

William Wilson Baden, (F), A. B., 1881, LL. B., Univ. of Md., 1883, Professor, Southwestern Univ., 1892-93.—Professor of Greek, Central Univ., Ky.

Robert Payne Bigelow, (F), S. B., Harvard, 1887, Bruce Fellow, 1891-93.—Instructor in Biology, Mass. Inst. of Technology.

Edwin Winfield Bowen, A. B., Randolph Macon, 1887, Assistant Professor, Univ. of Missouri, 1892-93.—Professor of Latin, Randolph Macon Coll.

Immanuel Moses Casanowicz.—Washington, D. C.

Starr Willard Cutting, A. B., Williams, 1887.—Associate Professor of German, Univ. of Chicago.

Rev. William Levering Devries, (F), A. B., 1888, B. D., General Theol. Sem., N. Y., 1894.—Clergyman, Washington, D. C.

Albert Bernhardt Faust, (F), A. B., 1889, Instructor, 1894-96.—Associate Professor of German, Wesleyan Univ.

George Wilton Field, A. B., Brown, 1887, Associate Professor, Brown Univ., 1893-96.—Biologist, R. I. Agric. Exper. Station.

Joseph Elliott Gilpin, A. B., 1889.—Instructor in Chemistry.

John Leslie Hall, (F).—Professor of English and History, William and Mary Coll.

William Asbury Harris, (F), A. M., Richmond, 1886, Acting Professor, Ripon, 1892-93.—Professor of Greek, Baylor Univ.

Frederick Clemson Howe, A. B., Allegheny Coll., 1889.—Attorney at Law, Cleveland.

William Isaac Hull, A. B., 1889.—Professor of History, etc., Swarthmore Coll.

Harry Clary Jones, (F), A. B., 1889.—Instructor in Physical Chemistry.

James Lawrence Kellogg, (F), S. B., Olivet, 1888.—Professor of Biology, Olivet Coll.

Charles Rollin Keyes, (F), S. B., Iowa State Univ., 1887.—State Geologist, Jefferson, Mo.

Elmer Peter Kohler, (F), A. B., Muhlenberg, 1886.—Associate in Chemistry, Bryn Mawr Coll.

*Paul Erasmus Lauer, (F), A. B., Adelbert, 1885, Assistant Supt. of Schools, Cleveland, 1892-93. * *February* 20, 1893.

Edwin Seelye Lewis, (F), A. B., Wabash, 1888.—Assistant Professor of Romance Lang., Princeton.

David Judson Lingle, (F), S. B., Chicago, 1885.—Instructor in Physiology, Univ. of Chicago.

Alvin Frank Linn, (F), A. B., Wittenberg, 1884.—Professor of Chemistry and Mineralogy, Wittenberg Coll., Ohio.

James Alexander Lyman, A. B., Beloit, 1888, Docent, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Portland Academy, Oregon.

John Hanson Thomas Main, (F), A. B., Moore's Hill, 1880.—Professor of Greek, Iowa Coll.

Frank Jewett Mather, Jr., (F), A. B., Williams, 1889.—Instructor in English, Williams Coll.

Michael Andrew Mikkelsen, (F), A. B., Luther, 1886.—Montclair, N. J.

Robert Milton Parks, Jr., A. B., Indiana Univ., 1879, Professor, Furman Univ., 1892-93.—Professor of Chemistry, Central Univ., Ky.

Charles Lane Poor, (F), S. B., Coll. of the City of New York, 1886, Instructor and Associate, 1891-95.—Associate Professor of Astronomy.

John Dyneley Prince, (F), A. B., Columbia, 1888.—Professor of Semitic Lang., New York Univ.

John Cunningham Robertson, (F), A. M., Univ. of Va., 1885.—Professor of Greek, St. Stephen's Coll., N. Y.

Charles Hunter Ross, (F), S. B., Ala. Agric., 1886.—Professor of Modern Lang., Ala. Polytechnic Inst.

Harry Luman Russell, S. B., Univ. of Wis., 1888.—Assistant Professor of Bacteriology, Univ. of Wis.

William Amasa Scott, A. B., Univ. of Rochester, 1886.—Professor of Economic History and Theory, Univ. of Wis.

Will Bush Shober, A. B., St. John's, 1885, Instructor in Chemistry, Lehigh Univ., 1892-96.—Cumberland, Md.

Martin Bell Stubbs, A. B., Haverford, 1888.—Chemist, La Salle, Ill.

Harry Maas Ullmann, A. B., 1889, Honorary Fellow, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Lehigh Univ.

Bert John Vos, (F), A. B., Univ. of Mich., 1888, Instructor, Univ. of Chicago, 1892-93.—Associate in German. (37)

1893.

Henry Harold Ballard, A. B., 1888, Instructor in Chemistry, Rose Polytech. Inst., 1893-96.—Fellow by Courtesy.

Florence Bascom, S. B., Univ. of Wis., 1884, Instructor, Ohio State Univ., 1893-95.—Lecturer in Geology, Bryn Mawr.

Jasper Luther Beeson, A. B., Univ. of Ala., 1889.—Acting Professor of Sciences, Bethel Coll., Ky.

Alexander Mitchell Carroll, (F), A. M., Richmond, 1888.—Professor of Greek, Richmond Coll., Va.

Andrew Fuller Craven, A. B., Harvard, 1889, LL. B., Univ. of Chicago, 1870.—Professor of Economics, Columbian Univ.

John Bascom Crenshaw, A. M., Randolph Macon, 1881.—Instructor in Physical Culture.

Ulysses Sherman Grant, (F), S. B., Univ. of Minn., 1888.—Assistant State Geologist, Minneapolis.

David I. Green, A.B., Alfred Univ., 1885.—Superintendent, Organized Charities, Hartford, Conn.

William Richard Grey, A. B., Davidson, 1884.—Professor of Latin and French, Davidson Coll.

George Henry Haynes, A. B., Amherst, 1887.—Professor of History and Political Science, Worcester Polytech. Inst.

Charles Downer Hazen, A. B., Dartmouth, 1889.—Professor of History, Smith Coll.

Frank Irving Herriott, A. B., Iowa, 1890.—Professor of Economics, Iowa Coll.

David Hull Holmes, (F), A. B., Ohio Wesleyan, 1885, Acting Professor, Allegheny Coll., 1893-94.—Professor of Latin, Univ. of Kansas.

Arthur John Hopkins, (F), A. B., Amherst 1885, Professor, Westminster Coll., 1893-94.—Assistant Professor of Chemistry, Amherst.

Theodore Hough, (F), A. B., 1886, Instructor, McDonogh School, 1886-89.—Assistant Professor of Physiology, Mass. Inst. of Tech.

James Alton James, (F), B. L., Univ. of Wis., 1888.—Professor of History, Cornell Coll., Iowa.

Henry Read McIlwaine, A. B., Hampden Sidney, 1885.—Professor of English and History, Hampden Sidney Coll.

Louis Emil Menger, (F), A. B., Mississippi Coll., 1888, Instructor, 1893-94.—Associate in Romance Languages.

Colyer Meriwether, A. B., 1886, Instructor in Sendai, Japan, 1889-92.—Instructor, Washington High School.

* Lucius Salisbury Merriam, (F), S. B., Vanderbilt, 1889, Instructor in Political Economy, Cornell, 1893. * *November* 18, 1893.

Maynard Mayo Metcalf, (F), A. B., Oberlin, 1889, Bruce Fellow, 1893.—Associate Professor of Biology, Woman's Coll., Balt.

Daniel Alexander Murray, (F), A. B., Dalhousie, 1884, Associate Professor, New York Univ., 1890-94.—Instructor in Mathematics, Cornell.

William Peters Reeves, A. B., 1889.—Assistant in English, Union Coll.

Charles Alphonso Smith, A. B., Davidson, 1884.—Professor of English, La. State Univ.

George Owen Squier, (F), U. S. Mil. Acad., 1887.—First Lieut., U. S. A.; Instructor, Artillery School, Fortress Monroe.

John Nesbit Swan, A.B., Westminster Coll., Pa., 1886.—Professor of Chemistry, Monmouth Coll.

Frederick Tupper, Jr., (F), A. B., Charleston, 1890, Professor, Wells Coll., 1893-94.—Professor of English, Univ. of Vt.

Frank Alfred Wolff, Jr., (F), A. B., 1890.—Chemist, Dept. of Agric., Washington.

(28)

1894.

James Nesbit Anderson, A. M., Univ. of Va., 1887.—Professor of Latin and Greek, Univ. of Oklahoma.

John Spencer Bassett, (F), A. B., Trinity (N. C.), 1888.—Professor of History, Trinity Coll., N. C.

William Julian Albert Bliss, A. B., Harvard, 1888, Lecturer, 1894-95, Instructor, Woman's Coll., Balt., 1894-95.—Assistant in Physics.

James Douglas Bruce, A. M., Univ. of Va., 1883.—Associate in English Philology, Bryn Mawr.

James Dowden Bruner, A. B., Franklin Coll., 1888, Professor, Univ. of Ill., 1893-95.—Assistant Professor of Romance Lang., Univ. of Chicago.

John Emery Bucher, A. C., Lehigh, 1891.—Instructor in Chemistry, Tufts Coll.

Frank Kenneth Cameron, A. B., 1891.—Associate Professor of Chemistry, Catholic Univ.

William Embert Chamberlin, A. B., Oberlin, 1887, Instructor, Wabash Coll., 1894-95.—Chemist, New York City.

Abraham Cohen, (F), A. B., 1891.—Instructor in Mathematics.

Louis Leaming Forman, A. M., Univ. of Pa., 1890.—Instructor in Greek, Cornell.

Edward Curtis Franklin, S. B., Univ. of Kan., 1888.—Associate Professor of Chemistry, Univ. of Kansas.

Joseph Hendren Gorrell, A. B., Washington and Lee, 1888.—Professor of Modern Languages, Wake Forest Coll.

George Perry Grimsley, A. B., Ohio State Univ., 1890.—Professor of Geology, etc., Washburn Coll.

Ross Granville Harrison, (F), A. B., 1889, Bruce Fellow, 1894, Lecturer, Bryn Mawr, 1894-95.—Instructor in Anatomy.

Robert Nelson Hartman, A. B., Pa. Coll., 1891.—Instructor in Chemistry, Tufts Coll.

Jacob H. Hollander, (F), A. B., 1891.—Associate in Economics.

Lorrain Sherman Hulburt, A. B., Univ. of Wis., 1883, Instructor, 1892-94.—Associate in Mathematics.

Masanobu Ishizaka, Ph. B., Albion Coll., 1891.—Lecturer in History and Economics, Mie-Ji-Gaku-In, Tokio.

Thomas Atkinson Jenkins, A. B., Swarthmore, 1887.—Instructor in Romance Lang., Vanderbilt.

Christopher Johnston, (F), A. M., Univ. of Va., 1879, M. D., Univ. of Md., 1880, Instructor, 1891-94.—Associate in the Semitic Languages.

Emory Bair Lease, (F), A. B., Ohio Wesleyan, 1885, Professor, Allegheny Coll., 1894-96.—Assistant Professor of Latin, Univ. of Mich.

Arthur Stanley Mackenzie, (F), A. B., Dalhousie, 1885.—Associate Professor of Physics, Bryn Mawr.

*Edward Payson Manning, (F), A. B., Brown, 1889, Instructor, St. Lawrence Univ., 1894-95. * *February* 15, 1897.

Charles Carroll Marden, A. B., 1889, Instructor, Univ. of Mich., 1890-91.—Instructor in Romance Lang.

Edward Bennett Mathews, (F), A. B., Colby, 1891.—Associate in Mineralogy.

Philip Randle Moale, A. B., 1889.—Analytical Chemist, New York City.

Constance Pessels, B. L., Univ. of Texas, 1886.—Instructor in English, Univ. of Texas.

Jesse Siddall Reeves, S. B., Amherst, 1891.—Richmond, Ind.

Arthur Percy Saunders, (F), A.B., Toronto, 1890.—Instructor in Chemistry, Univ. of Wis.

Robert Lincoln Slagle, A. B., Lafayette, 1887.—Professor of Chemistry, S. Dakota Agric. Coll.

Daniel Gurden Stevens, Jr., (F), A. B., 1891.—Student, Crozer Theological Sem.

Frederick Henry Sykes, (F), A.B., Toronto, 1885.—Professor of English, Western Univ., London, Ont.

Milo Scott Walker, Ph. B., Wooster, 1889.—Instructor in Chemistry and Physics, Racine (Wis.) High School.

George Francis Weida, (F).—Professor of Chemistry, Baker Univ., Kansas. (34)

1895.

Rufus Mather Bagg, A. B., Amherst, 1891.—Assistant in Geology.

Thomas Stockham Baker, (F), A. B., 1891.—Instructor in German.

James Curtis Ballagh, A. B., 1894.—Instructor in History.

Daniel Base, A. B., 1891.—Associate Professor of Chemistry, Md. Coll. of Pharmacy.

Henry Marvin Belden, A. B., Trinity (Conn.), 1888.—Associate Professor of English, Univ. of Missouri.

Arthur Fisher Bentley, (F), A. B., 1892.—Lecturer in Economics, Univ. of Chicago.

Samuel Walker Beyer, (F), S. B., Iowa Agric., 1889.—Associate Professor of Geology, Iowa Agric. Coll.

William Bromwell, A. B., 1888.—Instructor in Chemistry, Pratt Inst., Brooklyn.

Clarence Griffin Child, (F), A. B., Trinity (Conn.), 1886.—Assistant Editor, Worcester's Dictionary; Instructor in English, Univ. of Pa.

Fonger De Haan, (F).—Associate in Romance Languages.

Charles Sumner Estes, A. B., Colby, 1884.—Professor of Latin, Furman Univ., S. C.

Henry Fay, A. B., Lafayette, 1889.—Instructor in Chemistry, Mass. Inst. of Tech.

Henry Stewart Gane, (F), A. B., Amherst, 1891.—U. S. Geol. Survey, Washington.

George William Gray, A.B., 1890.—Chemist, Standard Oil Company, Whiting, Ind.

John Joseph Griffin, A. B., Ottawa Univ., 1881.—Professor of Chemistry, Catholic Univ.

William August Haussmann, (F), A. B., 1892.—Instructor in German, Burlington, N. J.

John Haynes, A. B., Williams, 1888.—Professor of History, etc., Free Academy, Norwich, Conn.

Samuel Rivers Hendren, A. B., Washington and Lee, 1892.—Staunton, Va.

Howard Haines Higbee, A. B., Yale, 1884, Assistant, Tufts Coll., 1895-96.—Assistant in Chemistry, Hamilton Coll.

Rockwell Dennis Hunt, Ph. B., Napa Coll., 1890.—Professor of History, etc., Univ. of the Pacific.

Joseph Rufus Hunter, A. B., Wake Forest, 1885.—Professor of Chemistry, Richmond Coll., Va.

George Wesley Johnston, (F), A. B., Toronto, 1886, Acting Assistant Professor, Cornell, 1895-96.—Lecturer in Latin, Univ. of Toronto.

Thomas Franklin Kane, (F), A. B., De Pauw, 1888.—Professor of Latin, Olivet Coll.

William Jay Karslake, S. B., Lafayette, 1891, Instructor, Dalhousie Univ., 1895-96. —Chemist, Middletown, Conn.

George Charles Keidel, (F), A. B., 1889.—Assistant in Romance Lang.

William Hamilton Kirk, (F), A. B., 1893.—Instructor in Latin, Vanderbilt.

John Holladay Latane, A. B., 1892.—Instructor in History, etc., San Rafael, Cal.

Exum Percival Lewis, S. B., Columbian, 1888.—Assistant Professor of Physics, Univ. of Cal.

William Henry Maltbie, (F), A. B., Ohio Wesleyan, 1890.—Associate Professor of Mathematics, Woman's Coll., Balt.

Solomon Reid McKee, A. B., Davidson, 1888.—Professor of Chemistry, Ogden Coll., Ky.

Thomas Francis Moran, (F), A. B., Univ. of Mich., 1887.—Professor of History, etc., Purdue Univ.

Louis Trenchard More, (F), Ph. B., Washington Univ., 1892, Instructor, Worcester Polytech., 1895-96.—Demonstrator of Physics, Univ. of Neb.

Anthony Moultrie Muckenfuss, A. B., Wofford, 1889.—Professor of Chemistry, Millsaps Coll., Miss.

Lyman Churchill Newell, Ph. B., Brown, 1890.—Instructor in Chemistry, High School, Somerville, Mass.

James Flack Norris, (F), A. B., 1892.—Instructor in Chemistry, Mass. Inst. of Tech.

Edwin Fitch Northrup, (F), A. B., Amherst, 1891.—Associate Professor of Physics, Univ. of Texas.

Robert Somerville Radford, B. Ph., Univ. of Va., 1889, Ph. D., 1891, and A. M., 1892.—Instructor in Latin, Academy of Northwestern Univ.

René de Saussure, École Polytechnique, Paris.—Professor of Mathematics, Catholic Univ.

Thomas Edward Shields, A. M., St. Mary's Sem., 1892.—Instructor in Biology, St. Paul's Theol. Sem., Minn.

John Archer Silver, A. B., Princeton, 1886. —Professor of History, Hobart Coll.

Alfred William Stratton, (F), A. B., Toronto, 1887.—Instructor in Sanskrit, Univ. of Chicago.

William Stuart Symington, Jr., A. B., 1891, Associate Professor, Stanford, 1894-96.—Professor of Romance Lang., Amherst.

Masayoshi Takaki, S. B., Syracuse, 1891.

Robert Richardson Tatnall, S. B., Haverford, 1890.—Instructor in Physics, Univ. of Pa.

Thaddeus Peter Thomas, B. P., Univ. of Tenn., 1885.—Associate Professor of History, Woman's College, Balt.

James Waddell Tupper, A. B., Dalhousie, 1891.—Editor and Univ. Extension Lecturer, Phila.

William Achenbach Wetsel, A. B., Lafayette, 1891.—Ackermanville, Pa. (47)

1896.

Benjamin William Arnold, Jr., A. B., Randolph Macon, 1891.—Instructor in History, etc., Richmond, Va.

George Melville Bolling (F), A. B., Loyola, 1891.—Instructor in Sanskrit, etc., Catholic Univ.; Fellow by Courtesy.

Ferdinand Bonnotte.—Graduate Student.

Alfred Cookman Bryan, A. B., 1892.—Instructor, Washington High School.

Arthur Douglas Chambers, (F), A. B., Toronto, 1892.—Chemist, Lima, O.

Julian Alvin Carroll Chandler, A. B., William and Mary, 1891.—Instructor in English, Woman's College, Richmond, Va.

James Wilkinson Chapman, Jr., A. B., Washington Coll. (Md.), 1892.—Student of Law, Univ. of Md.

Henry Scofield Cooley, S. B., New York Univ., 1891.—Summit, N. J.

Henry Rushton Fairclough, (F), A. B., Toronto, 1883, Lecturer, Toronto, 1887-93.—Associate Professor of Greek and Latin, Stanford Univ.

Edson Fessenden Gallaudet, A. B., Yale, 1893.—Westinghouse Electric Co., Pittsburg.

William Francis Gallaway, (F), A. B., 1891. —Classical Instructor, Savannah, Ga.

Frederick Stearns Hollis, S. B., Mass. Inst. of Tech., 1890.—Boston, Mass.

Reid Hunt, (F), A. B., 1891.—Tutor in Physiology, Columbia.

Charles William Leverett Johnson (F), A. B., 1891.—Fellow by Courtesy.

Oliver Martin Johnston, (F), A. B., Mississippi Coll., 1890.—Lecturer in Old French Philology, Bryn Mawr.

Frederick Robertson Jones, A. B., Western Md., 1892.—Instructor in History, etc., Western Md. Coll.

James Pinckney Kinard, S. C., Mil. Acad., 1886.—Professor of English, Winthrop School, S. C.

Henry McElderry Knower, (F), A. B., 1890, Bruce Fellow, 1895-96.—Instructor in Biology, Williams Coll.

Gordon Jennings Laing, (F), A. B., Toronto, 1891.—Fellow, Amer. School of Classical Studies, Rome.

George Lefevre (F), A. B., 1891.—Bruce Fellow.

Ebenezer Mackay, (F), A. B., Dalhousie, 1886.—Instructor in Chemistry, Dalhousie.

Raphael Monroe McKenzie, S. B., New York Univ., 1890.—Rahway, N. J.

Henry Ludwell Moore, (F), A. B., Randolph Macon, 1892.—Instructor in Economics.

Franklin Lafayette Riley, (F), A. B., Miss. Coll., 1889.—President, Hillman Coll., Miss.

Brantz Mayer Rossel, (F), A. B., 1889.—Instructor in Physics, Washington High School.

Herbert Armistead Sayre, B. E., Univ. of Ala., 1893.—Acting Professor of Mathematics, etc., Ursinus Coll., Pa.

Frederick George Gottlob Schmidt, (F).—Acting Professor of German, Cornell Coll.

Thomas Stanley Simonds, A. B., Harvard, 1884.—Classical Master, College of St. James Grammar School, Md.

George Otis Smith, (F), A. B., Colby, 1893.—U. S. Geol. Survey, Washington.

Michael Druck Sohon, A. C., Lehigh, 1890, and M. S., 1894.—Instructor in Organic Chemistry, Lehigh.

Francis Edgar Sparks, A. B., 1893.—Balt.

Frederic William Speirs, S. B., Worcester Polytech., 1888.—Professor of Economics, Drexel Inst.

Arthur Coe Spencer, S. B., Case School, 1892.—U. S. Geol. Survey, Washington.

Thomas Hardy Taliaferro, (F), C. E., Va. Mil. Inst., 1890.—Instructor in Mathematics, Pa. State Coll.

John Thorne, A. B., Denison, 1885.—Balt.

Harry Langford Wilson, (F), A. B., Queen's Univ. (Ont.), 1887.—Instructor in Latin. (36)

1897.

Samuel Eagle Forman, A. B., Dickinson, 1887.—Graduate Student.

Charles Francis Woods, Jr., A. B., 1891.—Graduate Student. (2)

(Degrees will also be conferred at the close of the academic year in June.) (396)

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8. Bachelors of Arts.

(When the institution is not named, the Johns Hopkins University is to be understood. (F) indicates that the person has held a Fellowship here.—* Died.)

1879.

George Washington McCreary.—City Librarian, Baltimore.

Chase Palmer, (F), Ph. D., 1882, Assistant, Mass. Inst. of Tech., 1882-83, Professor, Mass. Normal School, Salem, 1883-87, Assistant, Tufts Coll., 1887-88, Professor, Wabash Coll., 1888-90.—Professor of Chemistry, Manual Training High School, Louisville, Ky.

Edward Henry Spieker, (F), Ph. D., 1882, Instructor and Associate, 1882-88.—Associate Professor of Greek and Latin. (3)

1880.

Rev. Thomas Milton Beadenkopf, B. D., Yale, 1885.—Clergyman, Baltimore.

Allen Kerr Bond, M. D., Univ. of Md., 1882.—Physician, Baltimore.

William Cathcart Day, (F), Ph. D., 1883, Professor, St. John's Coll., 1883-84, and Univ. of Nashville, 1884-87.—Professor of Chemistry, Swarthmore Coll.

Henry Laurence Gantt, M. E., Stevens Inst. of Tech., 1884, Instructor, McDonogh School, 1886-87.—Mechanical Engineer, Norristown, Pa.

Edgar Goodman, LL. B., Univ. of Md., 1881.—Attorney at Law, Baltimore.

Rev. Carl Eckhardt Grammer, Va. Theol. Sem., 1884, S. T. D., Trinity (Conn.), 1895.—Professor of Ecclesiastical History, Virginia Theol. Sem.

Alexander Fridge Jamieson.—Latin Master, Lawrenceville School, N. J.

*Edmund Allen Jarvis. * *October* 15, 1880.

Stewart Brian Linthicum, LL. B., Univ. of Md., 1882.—Attorney at Law, Portland, Ore.

John Hanson Lowe, LL. B., Univ. of Md., 1882.—Attorney at Law, Baltimore.

Rev. Leigh Clinton Morgan, late Instructor, Kenyon College, O.—New York City.

*Nelson Palmer. **June* 12, 1886.

Thomas Pettigrew.—Civil Engineer, Parkersburg, W. Va.

Harry Fielding Reid, (F), Ph. D., 1885, Assistant, 1882–84, Lecturer, 1894–96, Professor, Case School, 1886–94, Assoc. Professor, Univ. of Chicago, 1896–96.—Associate Professor of Geological Physics.

Rev. Wiltz Raymond Stricklen.—Clergyman, Washington, D. C.

Lewis Webb Wilhelm, (F), Ph. D., 1884.—Mathematical Instructor, Baltimore.

(16)

1881.

William Wilson Baden, (F), Ph. D., 1892, LL. B., Univ. of Md., 1883, Professor, Southwestern Univ., 1892–93.—Professor of Greek, Central Univ., Ky.

Henry Johns Bowdoin, LL. B., Univ. of Md., 1883.—Attorney at Law, Balt.

John Wilson Brown.—Philadelphia, Pa.

David Talbot Day, (F), Ph. D., 1884, Teacher, Balt., 1885–86.—U. S. Geol. Survey, Washington.

William Henry Howell, (F), Ph. D., 1884, M. D., Univ. of Mich., 1890, Assistant, Associate, and Associate Professor, 1884–89, Lecturer and Professor, Univ. of Mich., 1889–92, Associate Professor, Harvard, 1892–93.—Professor of Physiology.

John Hemsley Johnson, LL. B., Univ. of Md., 1887, Instructor, McDonogh School, 1881–86.—Attorney at Law, Balt.

James Edward Keeler, D. Sc., Univ. of Cal., 1893, Allegheny Observ., 1882–86, Fellow, Royal Astronom. Society of London, Lick Observ., 1886–91.—Professor of Astro-Physics, Western Univ. of Pa., and Director, Allegheny Observatory.

Rev. Edwin George Richardson.—Clergyman, Milwaukee, Wis.

Adoniram Judson Robinson, LL. B., Univ. of Md., 1885, Instructor, Balt. City Coll., 1881–87.—Attorney at Law, Balt.

*Henry Rolando, M. D., Univ. of Md., 1883, Resident Physician, Presbyterian Hospital, N. Y., 1883–85. * *October* 4, 1888.

Lee Sale, LL. B., Washington Univ., 1885, Instructor, Louisville High School, 1881–83.—Attorney at Law, St. Louis, Mo.; Lecturer, St. Louis Law School.

Mactier Warfield, M. D., Univ. of Maryland, 1884.—Physician, Baltimore.

(12)

1882.

William Hughlett Adkins, LL. B., Univ. of Md., 1883.—Attorney at Law, Easton, Md.

Thomas Alexis Berry.—Laurel, Md.

Gustav Bissing, (F), Ph. D., 1886.—Principal Examiner, Div. A, U. S. Patent Office.

Walter Bernard Clarkson, Teacher, Jacksonville, 1880–83.—Supt. of County Schools, Jacksonville, Fla.

Hermann Louis Ebeling, (F), Ph. D., 1891.—Professor of Greek, Miami Univ.

Louis Garthe.—Baltimore.

Edward Ingle.—Baltimore.

Richard Fuller Kimball, LL. B., Univ. of Md., 1884.—Attorney at Law, Baltimore.

*Gustav Adolph Liebig, Jr., (F), Ph. D., 1885, Assistant, 1887–90. * *February* 10, 1897.

Charles William Emil Miller, (F), Ph. D., 1886, Professor, Peoria (Ill.) High School, 1888–90, and Walther Coll., St. Louis, 1890–91.—Associate in Greek.

James Page, Allegheny Observatory, 1886–87.—U. S. Coast Survey, Washington.

Albert Gallatin Palmer, (F), Ph. D., 1885, Assistant and Assistant Professor, Swarthmore, 1885–87.—Chemist, Baltimore.

Robert Miller Reese.—U. S. Department of Agriculture, Washington, D. C.

Lewis Tebbetts Stevens, (F), M. D., Harvard, 1887.—Physician, St. Louis, Mo.

Herbert Thorndyke Tiffany, LL. B., Univ. of Md., 1885.—Washington, D. C.

(15)

1883.

William Shirley Bayley, (F), Ph. D., 1886.—U. S. Geological Survey; Professor of Geology and Mineralogy, Colby Univ.

Maurice Fels, LL. B., Univ. of Pa., 1886.—Attorney at Law, Philadelphia.

David Sterrett Gittings.—Baltimore.

William Beatty Harlan, LL. B., Univ. of Md., 1885, A. M., St. John's, 1888.—Attorney at Law, Belair, Md.

George Theophilus Kemp, (F), Ph. D., 1886, M. D., Long Island Med. Coll., 1891, Demonstrator, Univ. of Pa., 1886-87, Associate and Associate Director, etc., Hoagland Lab., 1888-93.—Fellow by Courtesy.

Gonzalez Lodge, (F), Ph. D., 1886, Professor, Davidson, 1886-88.—Professor of Latin, Bryn Mawr.

William Edgar Stratton, M. D., Harvard, 1886.—Physician, Brooklyn, N. Y.

Henry Winslow Williams, LL. B., Univ. of Md., 1885.—Attorney at Law, Baltimore.

Henry Van Peters Wilson, (F), Ph. D., 1888, Bruce Fellow, 1888-89.—Professor of Biology, Univ. of N. C.

William John Witzenbacher, Instructor, McDonogh School, 1883-86.—Attorney at Law, Hagerstown, Md. (10)

1884.

Rev. Albert Clayton Applegarth, Ph. D., 1887.—Clergyman, Chester, Pa.

Charles Walter Artz, LL. B., Columbia, 1886.—Attorney at Law, New York City.

Walter Bliss Canfield.—Chemist, Coatesville, Pa.

George Gibson Carey, LL. B., Univ. of Md., 1886.—Attorney at Law, Baltimore.

William Kennedy Cromwell.—Baltimore.

Charles William Remsberg Crum, M. D., Univ. of Md., 1888, Instructor, Mercersburg Coll., 1884-86, 1889-90, Professor of Mathematics, Ursinus Coll., 1892-95.

Harry Friedenwald, M. D., Coll. of Phys. and Surg., Balt., 1886.—Physician, Balt.

Rev. William Lindsay Glenn, LL. B., Univ. of Md., 1888.—Clergyman, Balt.

John Hinkley, LL. B., Univ. of Md., 1886.—Attorney at Law, Balt.

Charles Morris Howard, LL. B., Univ. of Md., 1888.—Attorney at Law, Balt.

John Deering Lord, Jr., LL. B., Columbia, 1886.—Attorney at Law, Baltimore.

Jere Williams Lord, M. D., Univ. of Pa., 1887.—Instructor in Anatomy and Associate in Dermatology.

William Patrick Lyons, LL. B., Univ. of Md., 1886.—Attorney at Law, Balt.

Edgar George Miller, Jr., LL. B., Univ. of Md., 1886.—Attorney at Law, Balt.

William Ridgely Orndorff, (F), Ph. D., 1887.—Assistant Professor of Organic Chemistry, Cornell.

George Dobbin Penniman, LL. B., Univ. of Md., 1886.—Attorney at Law, Baltimore.

William Henry Perkins, Jr., LL. B., Univ. of Md., 1888.—Attorney at Law, Baltimore.

*George Clement Stokes, Jr., LL. B., Univ. of Md., 1888. **January* 21, 1897.

*William John Thomas, Professor of Mathematics, Western Maryland Coll., 1884-85. * *March* 9, 1885.

*William Ferdinand Walz. * *March* 21, 1887.

Frederick Henry Wilkens, Ph. D., Leipsic, 1891, Assistant Professor of German, Univ. of Wis., 1893-96.—Fellow by Courtesy.

George Wishart Edmond, (*extra ordinem*), Assistant, 1889-90.—Garvanza, Cal.

Charles Howard Shinn, (*extra ordinem*).—San Francisco, Cal. (23)

1885.

John Pendleton Campbell, (F), Ph. D., 1888.—Professor of Biology, Univ. of Ga.

John Glenn, Jr., LL. B., Univ. of Md., 1887.—Attorney at Law, Baltimore.

Rev. Junius Moore Horner, B. D., General Theol. Sem., N. Y., 1890.—Classical Instructor, Oxford, N. C.

James Albert Loane.—Baltimore.

Harry Wilbur Price, LL. B., Columbian, 1887.—Attorney at Law, Chicago.

Benjamin Titus Roberts, Jr.—Morgan Park, Ill.

Moses Roth Ryttenberg, LL. B., Univ. of Md., 1888.—Attorney at Law, N. Y.

Hugo Steiner, LL. B., Univ. of Md., 1887.—Attorney at Law, Baltimore.

Henry Hazlehurst Wiegand.—Electrician, Baltimore. (9)

1886.

Joseph Sweetman Ames, (F), Ph. D., 1890, Assistant and Associate, 1889-93.—Associate Professor of Physics.

Rev. Wilson Lloyd Bevan, B. D., General Theol. Sem., N. Y., 1889, A. M. and Fellow of Columbia, 1889, Ph. D., Munich, 1893.—Clergyman, Concord, Mass.

Thomas Hepburn Buckler, M. D., Univ. of Md., 1888.—Physician, Baltimore.

Alfred Robert Louis Dohme, Ph. D., 1889.—Chemist, Baltimore.

Albert Alvin Doub, Teacher, Frostburg, Md., 1886-93.—Attorney at Law, Cumberland, Md.

William Snyder Eichelberger, (F), Ph. D., 1891, Instructor in Mathematics, etc., Wesleyan Univ., 1891-96.—U. S. Nautical Almanac, Washington.

Harry English.—Instructor, High School, Washington, D. C.

Abraham Flexner.—Classical Instructor, Louisville, Ky.

William Edward Gates.—Cleveland, O.

*William Curns Lawrence Gorton, (F), Ph. D., 1889, Associate Professor and Professor of Mathematics, Woman's Coll., Balt., 1888-94. * *November* 8, 1894.

Joseph Edward Harry, (F), Ph. D., 1889.—Professor of Greek and German, Georgetown Coll., Ky.

Benjamin Henry Hartogensis.—Editor, Baltimore.

James Shaler Hodges, Instructor, St. Paul's School, N. H., 1886-88.—Electrician, Balt.

Theodore Hough, (F), Ph. D., 1893, Instructor, McDonogh School, 1886-89.—Assistant Professor of Physiology, Mass. Inst. of Tech.

Percy Meredith Hughes.—Instructor in the High School, Washington, D. C.

John Henry Laessig, Jr.—Chemist, Baltimore.

Allan McLane, Jr., LL. B., Univ. of Md., 1888.—Attorney at Law, Balt.

John Hanson Thomas McPherson, (F), Ph. D., 1890, Instructor, Univ. of Mich., 1890-91.—Professor of History, Univ. of Ga.

Colyer Meriwether, Ph. D., 1893, Instructor in Sendai, Japan, 1889-92.—Instructor, High School, Washington, D. C.

John Pleasants.—Baltimore.

Richard Hall Pleasants, Jr., LL. B., Univ. of Md., 1889.—Attorney at Law, Baltimore.

William Flood Smith, M. D., Phys. and Surg., Balt., 1889, Instructor, McDonogh School, 1886-87.—Physician, Balt.

Michael Daniel Stein.—San Francisco, Cal.

Bernard Wiesenfeld, LL. B., Univ. of Md., 1889.—Attorney at Law, Baltimore.

John Whitridge Williams, M. D., Univ. of Md., 1888.—Associate Professor of Obstetrics.

Langdon Williams.—Teacher, Philadelphia.

William Klapp Williams, Ph. D., 1889.—California.

John Randolph Winslow, M. D., Univ. of Md., 1888.—Physician, Baltimore.

* Allan Chase Woods. * *September* 9, 1896.

Frederick George Young, Vice-President, S. Dakota Normal School, 1888-91.—Professor of Economics, etc., Univ. of Oregon.

*Thomas McCabe, (*extra ordinem*), (F), Ph. D., 1888, Instructor, Univ. of Mich., 1888-89, Professor, Indiana Univ., 1889-90, Associate in French, Bryn Mawr, 1890-91. * *February* 22, 1891. (31)

1887.

Edward Carey Applegarth, (F), Ph. D., 1890, M. D., Phys. and Surg., Balt., 1892.—Physician, Baltimore.

Richard Howard Bayard, LL. B., Univ. of Md., 1889.—Attorney at Law, Balt.

Herbert Maxwell Brune, LL. B., Univ. of Md., 1889.—Attorney at Law, Baltimore.

Charles Edward Coates, Jr., Ph. D., 1891, Professor, St. John's Coll., 1891-93.—Professor of Chemistry, La. State Univ.

Rev. William Roswell Cole, B. D., Harvard, 1890.—Baltimore.

Paul Joseph Dashiell, Ph. D., 1891, Instructor, Lehigh, 1889-90, 1891-92.—Professor of Chemistry, U. S. Naval Acad.

George Peter Dreyer, (F), Ph. D., 1890, Demonstrator, 1890-92.—Associate in Biology.

Edward Duffy, Jr., LL. B., Univ. of Md., 1889.—Attorney at Law, Baltimore.

James Clark Fifield.—Attorney at Law, Minneapolis, Minn.

Julius Friedenwald, M. D., Phys. and Surg., 1890.—Physician, Baltimore.

Douglas Huntly Gordon, LL. B., Univ. of Md., 1889.—Editor, Baltimore.

Jay Cæsar Guggenheimer.—Attorney at Law, New York City.

Charles Homer Haskins, Ph. D., 1890, Instructor, 1889-90.—Professor of Institutional History, Univ. of Wis.

George Lincoln Hendrickson, Professor, Colorado Coll., 1889-91, and Univ. of Wis., 1891-96.—Professor of Latin, Univ. of Chicago.

Franz Otto Karl Hoffmann.

Robert Milligan McLane, Jr., LL. B., Univ. of Md., 1891.—Deputy State's Atty., Balt.

Robert William Rogers, Ph. D., Haverford, 1890, D. D., Wesleyan, 1894, Ph. D., Leipsic, 1895, Instructor, Haverford, 1887-90, Professor, Dickinson, 1890-93.—Professor of Hebrew, Drew Theol. Sem.; Lecturer, Woman's Coll., Balt.

Henry Oliver Thompson, LL. B., Univ. of Md., 1890.—Attorney at Law, Baltimore.

Benjamin Simon William Tuska, LL. B., Columbia, 1889.—Attorney at Law, N. Y.

Rev. Robert William Henry Weech.—Clergyman, Baltimore.

*Edward William Willis, M. D., University of Md., 1889. * *August* 7, 1893.

Henry Firey Wingert.—Attorney at Law, Hagerstown, Md.

Walter Bell Scaife, (*extra ordinem*), Ph. D., Vienna, 1887.—Pittsburg, Pa.

Albert Henry Smyth, (*extra ordinem*).—Professor of English, Central High School, Philadelphia. (34)

1888.

Henry Harold Ballard, Ph. D., 1893, Instructor in Chemistry, Rose Polytech. Inst., 1892-96.—Fellow by Courtesy.

Edward Ambrose Bechtel, (F), Professor, Mt. Morris Coll., Ill., 1889-91, and Yankton Coll., 1891-92, Teacher, Dayton, O., 1892-93.—Instructor in Latin, Northwestern Univ.

James William Black, Ph. D., 1891, Acting Professor, Georgetown Coll., Ky., 1891-92, Associate Professor, Oberlin, 1892-94.—Professor of History, etc., Colby Univ.

Charles Pliny Brigham, Ph. D., 1891.—Greenport, Long Island.

William Bromwell, Ph. D., 1895.—Instructor in Chemistry, Pratt Inst., Brooklyn.

* Hamilton McFarland Brown. * *May* 8, 1892.

Arthur Lee Browne.—Associate Professor of Chemistry, Balt. Medical Coll.

Charles Hamilton Carey.—Baltimore.

John Broughton Daish, Instructor, Washington High School, 1888-89.—Washington, D. C.

Rev. William Levering Devries, (F), Ph.D., 1892, B. D., General Theol. Sem., N. Y., 1894.—Clergyman, Washington, D. C.

Gustav Edward Gieske, M. D., Phys. and Surg., Balt., 1891.—Catonsville, Md.

Raleigh Colston Gildersleeve.—Architect, New York City.

Harris Hancock, Ph. D., Berlin, 1894.—Associate in Mathematics, Univ. of Chicago.

Walter Jones, Ph. D., 1891, Acting Professor, Wittenberg Coll., 1891-92, Instructor and Professor, Purdue Univ., 1892-95.—Assistant in Physiological Chemistry.

*William Augustine Jones, LL. B., Univ. of Ala., 1889. * *February* 11, 1894.

Arthur Lincoln Lamb.—Instructor in Natural Sciences, Jacob Tome Inst.

Charles Day Lanier.—Editor, New York.

John Bright Macauley.—Washington, D. C.

*William Howard Miller, Instructor in Mathematics, Stanford Univ., 1891-93. * *March* 2, 1893.

*George Neville Moore. * *October* 29, 1889.

John Henry O'Donovan, M. D., Univ. of Md., 1891.—Physician, Baltimore.

Frank Eugene Reader.—Attorney at Law, New Brighton, Pa.

Louis Rettger.—Instructor, Terre Haute (Ind.) High School.

David Ellsworth Roberts.—Baltimore.

Lessing Rosenthal, LL. B., Northwestern Univ., 1891.—Attorney at Law, Chicago.

Charles Edmund Simon, M. D., Univ. of Md., 1890.—Physician, Baltimore.

Rev. Charles Kephart Swartz, Oberlin Theol. Sem., 1892.—Gettysburg, Pa.

Robert Melvin Tarleton, E. M., Lehigh, 1895.—Mining Engineer, Omaha, Neb.

Edward Lucas White, Assistant, Dartmouth, 1891-92.—Classical Instructor, Balt.

John White, Jr., (F), Ph. D., 1891, Assistant, Cornell, 1891-93.—Instructor in Chemistry, Univ. of Neb.

Westel Woodbury Willoughby, (F), Ph. D., 1891, Acting Asst. Professor, Stanford Univ., 1894-95.—Attorney at Law, Washington; Associate in Political Science.

William Franklin Willoughby.—Statistical Expert, U. S. Dept. of Labor, Washington.

Charles Hiram Chapman, (*extra ordinem*), (F), Ph. D., 1890, Instructor and Associate, 1889-92.—President, Univ. of Oregon.

Charles Collier Holden, (*extra ordinem*), Teacher, N. C. and Md., 1888-95.—Graduate Student. (34)

1889.

Adolph Bernhard, Ph. D., Chicago, 1894.—Assistant in Chemistry, Univ. of Chicago.

Hiram Horsburgh Bice, Professor, Austin Coll., 1890-92, and Blackburn Univ., 1892-93, Instructor, St. Joseph (Mo.) High School, 1893-96.—Classical Instructor, N. Y.

John Sedgewick Billings, M. D., Univ. of Pa., 1892.—Physician, New York City.

Walton Bolgiano, M. D., Univ. of Pa., 1892.—Physician, Baltimore.

Theodore Cooke, Jr., M. D., Univ. of Md., 1891.—Physician, Baltimore.

Frank Barnum Culver.—Baltimore.

Richard Edward Edes, M. D., Harvard, 1895, Morgan Fellow, Harvard, 1890-91, Instructor, Mass. Inst. of Tech., 1892-93.—Physician, Dorchester, Mass.

Daniel Nathan Eisendrath, M. D., Chicago Med. Coll., 1891.—Physician, Chicago.

Albert Bernhardt Faust, (F), Ph. D., 1892, Instructor, 1894-96.—Associate Professor of German, Wesleyan Univ.

Charles Lee Fulton, LL. B., Univ. of Md., 1892.—Attorney at Law, Baltimore.

Joseph Elliott Gilpin, Ph. D., 1892.—Instructor in Chemistry.

Ross Granville Harrison, (F), Ph. D., 1894, Bruce Fellow, 1894, Lecturer, Bryn Mawr, 1894-95.—Instructor in Anatomy.

George Newton Cressy Henschen, Instructor, Reading High School, 1889-94.—Reading, Pa.

William Sadler Hilles.—Baltimore.

William Isaac Hull, Ph. D., 1892.—Professor of History, etc., Swarthmore Coll.

Harry Clary Jones, (F), Ph. D., 1892.—Instructor in Physical Chemistry.

George Charles Keidel, (F), Ph. D., 1895.—Assistant in Romance Lang.

Jesse William Lazear, M. D., Phys. and Surg. (N. Y.), 1892.—Assistant, Johns Hopkins Dispensary.

Alfred Mann, M. D., Phys. and Surg. (N. Y.), 1892.

Charles Carroll Marden, Ph. D., 1894, Instructor, Univ. of Mich., 1890-91.—Instructor in Romance Lang.

William Watson McCulloh, LL. B., Univ. of Md., 1892.—Student of Medicine.

Philip Randle Moale, Ph. D., 1894.—Analytical Chemist, New York City.

Waldo Newcomer.—Baltimore.

Leonard Magruder Passano.—Instructor in Mathematics, Mass. Inst. of Tech.

Arthur Jackson Patek, M. D., Univ. of Pa., 1892.

William Peters Reeves, Ph. D., 1893.—Assistant in English, Union College.

Legh Wilber Reid, M. S., Princeton, 1896.—Instructor in Mathematics, Princeton.

Ralph Robinson, LL. B., Univ. of Md., 1891.—Attorney at Law, Baltimore.

Brantz Mayer Roszel, (F), Ph. D., 1896.—Instructor in Physics, Washington High School.

Rev. John George Sadtler, B. D., General Theol. Sem., N. Y., 1893.—Clergyman, Baltimore.

Benjamin Bittinger Shreeves, LL. B., Univ. of Md., 1891.—Attorney at Law, Balt.

Robert Tunstall Taylor, M. D., Univ. of Va., 1891.—Physician, Baltimore.

Walter Herron Taylor, LL. B., Univ. of Va., 1891.—Attorney at Law, Norfolk, Va.

Winfield Scott Thomas, Professor, Chaffee Coll., 1889-90.—Classical Instructor, High School, Petaluma, Cal.

Harry Maas Ullmann, Ph. D., 1892, Honorary Fellow, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Lehigh Univ.

Horatio Alanson Warren.—Principal, Dayton (O.) Academy. (36)

1890.

John McEwen Ames.—Detroit, Mich.

William Hand Browne, Jr.—Instructor in Electricity, Univ. of Neb.

James Edmund Bryan, Jr., Instructor, Mich. School of Mines, 1891-92, Principal, Houghton (Mich.) High School, 1892-93.—Supt. of Schools, Litchfield, Ill.

Rev. Ralph Erskine Carson, Allegheny Theol. Sem., 1895, Classical Instructor, Phila., 1890-92.—Missionary in Egypt.

William Henry Carson, LL. B. and A. M., Harvard, 1894.—Attorney at Law, Camden, N. J.

Sydney Million Cone, M. D., Univ. of Pa., 1893.—Assistant in Surgical Pathology.

Vernon Cook, LL. B., Univ. of Md., 1892.—Attorney at Law, Baltimore.

Lucius Bradley Dorr, M. D., Univ. of Md., 1890.—Physician, Buffalo, N. Y.

Edwin Stanton Faust, Ph. D., Munich, 1893, Assistant, 1894-95.

Ned Arden Flood.—Meadville, Pa.

Herbert Friedenwald.—Philadelphia, Pa.

Fielding Hudson Garrison, M. D., Georgetown, 1893.—Physician, Washington.

Joseph Philip Gerry.—Instructor in English, Washington (D. C.) High School.

George William Gray, Ph. D., 1895.—Chemist, Standard Oil Co., Whiting, Ind.

Samuel Harris Guggenheimer.—Attorney at Law, New York City.

Daniel Dorsey Guy.—Editor, Baltimore.

James Chew Johnston, M. D., New York Univ., 1892.—Physician, New York.

Edward Parkin Keech, Jr., LL. B., Univ. of Md., 1892.—Attorney at Law, Baltimore.

Henry McElderry Knower, (F), Ph. D., 1896, Bruce Fellow, 1895-96.—Instructor in Biology, Williams Coll.

Berwick Bruce Lanier, M.D., Univ. of Md., 1892.—Physician, Baltimore.

Sylvan Hayes Lauchheimer, LL. B., Univ. of Md., 1892.—Attorney at Law, Baltimore.

Tilghman Brice Marden, M. D., Univ. of Md., 1892.—Physician, Balt.; Lecturer in Histology, Balt. Med. Coll.

George Clarence Morrison, LL. B., Univ. of Md., 1893.—Attorney at Law, Balt.

Arthur Alexander Oehm.—Instructor in Music, Baltimore.

*Arthur Rosewald Oppenheimer, M. D., Univ. of Pa., 1893. **April* 29, 1895.

Lyman Pierson Powell.—Theological Student, Philadelphia.

Rev. Samuel Guy Snowden, B. D., Drew Theol. Sem., 1893.—Clergyman, Westford, N. Y.

James Ernest Stokes, M. D., Univ. of Maryland, 1892.—Asst. Gynecologist, Johns Hopkins Hospital.

Isaac Lobe Straus, LL. B., Univ. of Md., 1892.—Attorney at Law, Balt.

Charles Snowden Watts, LL. B., Univ. of Md., 1893.—Attorney at Law, Balt.

William Wallace Whitelock, Ph. D., Munich, 1892.—New York.

William Whitridge.—Baltimore.

Adolph Grant Wolf.—Attorney at Law, Washington, D. C.

Frank Alfred Wolff, Jr., (F), Ph. D., 1893.—Chemist, Agricultural Dept., Washington.

James Homer Wright, M. D., Univ. of Md., 1892, A. M., Harvard, 1894, Fellow, Univ. of Pa., 1892-93.—Instructor in Pathology, Harvard; Pathologist in Chief, Mass. General Hospital, Boston.

Oscar Woodward Zeigler, Princeton Theol. Sem., 1893, A. M., Princeton, 1894.—Balt.

Inazo (Ota) Nitobe, (*extra ordinem*), Ph. D., Halle, 1890.—Professor of Political Economy, etc., Imperial Coll. of Agric., Sapporo, Japan. (37)

1891.

Michael Alexander Agelasto, A. M., Columbia, 1893.—Norfolk, Va.

Delano Ames, M. D., Univ. of Md., 1892.—Physician, Balt.; Lecturer in Pathology, Balt. Med. Coll.

Thomas Stockham Baker, (F), Ph. D., 1895.—Instructor in German.

Randolph Barton, Jr., LL. B., Univ. of Md., 1893.—Attorney at Law, Balt.

Daniel Base, Ph. D., 1895.—Associate Professor of Chemistry, Md. Coll. of Pharmacy.

William Bissing, M. E., Ohio State Univ., 1893.—Asst. Examiner, U. S. Patent Office.

Rev. Frederick Foye Briggs, Crozer Theol. Sem., 1894.—Clergyman, Philadelphia.

Shelliman Baer Brown.—Engineer, Balt.

Thomas Morris Brown.—Cleveland, O.

Sidney Hand Browne.—Electrical Engineer, Baltimore.

Henry Andrews Bumstead.—Instructor in Physics, Yale.

Frank Kenneth Cameron, Ph. D., 1894.—Associate Professor of Chemistry, Catholic Univ.

Malcolm John Cameron, A. M., St. Francis Xavier (N. Y.), 1892, LL. B. and A. M., Columbia, 1894.—Attorney at Law, N. Y.

George Carey.—Teacher, New York City.

Neilson Poe Carey.—Student, General Theol. Sem., N. Y.

Abraham Cohen, (F), Ph. D., 1894.—Instructor in Mathematics.

Harry Webster Cooke.—Attorney at Law, Denver, Colo.

Arthur Aaron Dembits.—New York City.

Augustus Kountze Detwiler, M. D., Univ. of Pa., 1894.—Physician, Omaha, Neb.

George W. Dobbin, M. D., Univ. of Md., 1894.—Assistant in Obstetrics.

William Francis Gallaway, (F), Ph. D., 1896.—Classical Instructor, Savannah, Ga.

George Henry Heitmuller, M. D., Univ. of Pa., 1894.—Physician, Washington, D. C.

Jacob H. Hollander, (F), Ph. D., 1894.—Associate in Economics.

Charles McHenry Howard, LL. B., Univ. of Md., 1893.—Attorney at Law, Balt.

Reid Hunt, (F), Ph. D., 1896.—Tutor in Physiology, Columbia.

Charles William Leverett Johnson, (F), Ph. D., 1896.—Fellow by Courtesy.

Henry Webster Keating.—Classical Instructor, Duxbury, Mass.

*William Knower, LL. B., Univ. of Md., 1893. **December* 27, 1894.

George Lefevre, (F), Ph. D., 1896.—Bruce Fellow.

George Milton Linthicum, M. D., Phys. and Surg. (Balt.), 1893.—Demonstrator, Woman's Med. Coll., Balt.; Physician, Baltimore.

Hugh Sisson Magruder.—Student of Architecture, Columbia Coll.

Arthur William McDougall.—General Secretary, Associated Charities, Orange, N. J.

Rev. Whitford L. McDowell.—Clergyman, Baltimore.

James Farnandis Mitchell.—Student of Medicine.

Archibald Campbell Murray.—Baltimore.

Charles Fairbank Painter, M. D., Harvard, 1895.—Asst. Resident Physician, Mass. General Hospital, Boston.

Alfred Wilmot Pleasants.—Baltimore.

Alfred Magill Randolph, Jr.—Electrician, Pittsburg, Pa.

William Ferdinand Rittler.—Baltimore.

Charles James Search, M. D., Univ. of Wooster, 1892.—Physician, Brooklyn, N.Y.

Alfred Jenkins Shriver, LL. B., Univ. of Md., 1893, A. M., Loyola, 1894.—Attorney at Law, Baltimore.

Rev. James Lawrenson Smiley.—Clergyman, Chaptico, Md.

Samuel King Smith, LL. B., Univ. of Md., 1893.—Attorney at Law, Baltimore.

Daniel Gurden Stevens, Jr., (F), Ph. D., 1894.—Student, Crozer Theol. Sem.

Charles Morton Stewart, Jr.—Baltimore.

William Stuart Symington, Jr., Ph. D., 1895, Assistant Professor, Stanford, 1894-95.—Professor of Romance Lang., Amherst.

Matthew Möller Johnson Vea.—Stoughton, Wis.

Charles Joseph West.—Kingfisher, Oklahoma.

Charles Francis Woods, Jr., Ph. D., 1897.—Graduate Student.

Rev. Edward L. Watson.—Clergyman, Baltimore. (50)

1892.

Harry Adler, M. D., Univ. of Md., 1895.—Physician, Baltimore.

Newton Diehl Baker, Jr., LL. B., Washington and Lee, 1894.—Washington, D. C.

Charles Gambrill Baldwin, LL. B., Univ. of Md., 1895.—Attorney at Law, Baltimore.

Edwin Bernhard Behrend, M. D., Georgetown, 1894.—Physician, Washington, D. C.

Rev. Lunsford Emory Bennett, B. D., Drew Theol. Sem., 1894.—Clergyman, Balt.

Arthur Fisher Bentley, (F), Ph. D., 1895.—Lecturer in Economics, Univ. of Chicago.

George Edward Boynton.—Principal, Utica Academy, N. Y.

Thomas Richardson Brown.—Student of Medicine.

Alfred Cookman Bryan, Ph. D., 1896.—Instructor, Washington High School.

Charles Weathers Bump.—Editor, Baltimore.

William Calvin Chesnut, LL. B., Univ. of Md., 1894.—Attorney at Law, Balt.

John Edwin Davis, LL. B., Univ. of Md., 1894.—Attorney at Law, Baltimore.

Henry Haywood Glassie.—Attorney at Law, Washington, D. C.

Leon Emanuel Greenbaum, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.

James Wesley Harvey, Jr., LL. B., Univ. of Md., 1893.—Baltimore.

William August Haussmann, (F), Ph. D., 1895.—Instructor in German, Burlington, N. J.

Jose Lewis Hirsh, M. D., Univ. of Md., 1895.—Physician, Baltimore.

Morris James.—Classical Instructor, High School, Berkeley, Cal.

Hugh Judge Jewett, Jr., LL. B., Univ. of Md., 1894.—Attorney at Law, Balt.

Theodore Woolsey Johnson, M. E., Stevens Inst., 1896.—Bethlehem, Pa.

John Holladay Latané, Ph. D., 1895.—Instructor in History, San Rafael, Cal.

Edward Jaquelin L'Engle.—Attorney at Law, Jacksonville, Fla.

Earl Perkins Lothrop, M. D., Niagara Univ., 1894.—Physician, Buffalo, N. Y.

Charles Whitney Mixter, A. M., Harvard, 1893.—Assistant in Economics, Harvard.

Walter Alexander Montgomery.—Graduate Student.

James Flack Norris, (F), Ph. D., 1895.—Instructor in Chemistry, Mass. Inst. of Tech.

Thomas Dobbin Penniman.—Graduate Student.

Charles William Peppler, (F).—Fellow by Courtesy.

Albert Moore Reese.—Baltimore.

William Miller Roberts.—Student of Medicine, Univ. of Md.

Abram Barr Snively, M. D., Univ. of Pa., 1895.—Physician, Waynesboro, Pa.

John Sargent Stearns, M. D., Georgetown, 1894.—Physician, Washington, D. C.

Charles Daniel Steenken, M. D., Phys. and Surg. (N. Y.), 1896.—Physician, Balt.
Leopold Stern.—Electrical Engineer, Balt.
Lester Latham Stevens, LL. B., Univ. of Md., 1894.—Attorney at Law, Baltimore.
Gustav Lürman Stewart.—Baltimore.
John Stewart, Jr.—Baltimore.
Redmond Conyngham Stewart, LL. B., Univ. of Md., 1894.—Attorney at Law, Baltimore.
Arthur Bertram Turner.—Professor of Mathematics, Temple Coll., Phila.
Harold John Turner.—Graduate Student.
Richard Henry Wilson, Jr. (41)

1893.

John Robert Abercrombie, M. D., Univ. of Md., 1895.—Physician, Baltimore.
Adolph Hall Ahrens.—Baltimore.
Theodore George Ahrens.
Delaware Clayton Andre, LL. B., Univ. of Md., 1894.—Attorney at Law, Baltimore.
Frank Andrews.—Teacher, Cabin John, Md.
William Steenbergen Blackford.—Baltimore.
George Stewart Brown, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
William Lawrence Clark.—Baltimore.
Frank Angier Clarke, Professor, Keachie Coll., 1893-94.—Student, Southern Baptist Theol. Sem., Louisville.
Edward Lowell Cox.—Chillicothe, O.
Noah Ernest Dorsey.—Fellow.
Howard Blake Dowell, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
John Hooper Edmondson, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
Henry Simpson Greenleaf, M. D., Univ. of Pa., 1895.
Wilmot Griffiss.—Baltimore.
Louis Philip Hamburger.—Student of Medicine.
John Hampden Hazelton.—Attorney at Law, Washington, D. C.
Lloyd Lowndes Jackson, Jr., LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
Millard Langfeld.—Student of Medicine.
John Leypold Griffith Lee, LL. B., Univ. of Md., 1894.—Attorney at Law, Baltimore.
Jacob Moses Moses, LL. B., Univ. of Md., 1895.—Attorney at Law, Baltimore.
Clayland Mullikin, LL. B., Univ. of Md., 1893.—Attorney at Law, Easton, Md.
Charles Watson Newhall.—Mathematical Instructor, Faribault, Minn.
Frederick Bogue Noyes.—Student of Medicine, Northwestern Univ.
Eugene Lindsay Opie.—Student of Medicine.
Charles Bingham Penrose, Jr.—Student of Law, Univ. of Md.
Clement Andariese Penrose.—Student of Medicine.
Charles Carroll Schenck.—Graduate Student.
Siegmund Bacharach Sonneborn.—Baltimore.
Morris Ames Soper, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
Francis Edgar Sparks, Ph. D., 1896.—Balt.
Alfred Earnest Speirs, Instructor, Lehigh Univ. Prep. School, 1893-94.—Cleveland, O.
Hugo Paul Thieme.—Graduate Student.
Douglas Hamilton Thomas, Jr.—Architect, Boston, Mass.
Edwin Litchfield Turnbull.—Baltimore.
Rev. John Ogle Warfield, B. D., Episcopal Theol. Sem., Camb., 1896.—Clergyman, Du Bois, Pa.
Henry Skinner West.—Professor, Balt. City Coll.; Graduate Student.
Frederick Wallace Wilson.—The Dalles, Oregon.
Leo Wolfenstein.—Cleveland, O.
William Hamilton Kirk, (*extra ordinem*), (F), Ph. D., 1895.—Instructor in Latin, Vanderbilt. (40)

1894.

John Griffith Ames, Jr.—Professor of English, etc., Kenyon Coll.
William Stevenson Baer.—Student of Medicine.
Adolph Elhart Baker.—Student, Union Theol. Sem., Va.
Walter Baumgarten, M. D., Washington Univ., 1896.—Resident Physician, City Hospital, St. Louis, Mo.
Arthur Henry Baxter.—Graduate Student.
Ernest Julius Becker.—Graduate Student.
Thomas Pumphrey Benson.—Student of Medicine.
Thomas Fitz Patrick Cameron.—Teacher, Funkstown, Md.
Moses S. Cohen, LL. B., Univ. of Md., 1896.—Attorney at Law, Balt.
Bernard Milton Cone, A. M., Columbia, 1896.—Student of Law, Columbia.
Charles Angelo Conrad.—Student of Law, Univ. of Md.
Walter Cox.—Student of Medicine.
Percy Millard Dawson.—Student of Medicine.
Eli Frank, LL. B., Univ. of Md., 1896.—Attorney at Law, Balt.
Nathaniel Edward Griffin.—Graduate Student.

Benjamin Howell Griswold.—Student of Law, Univ. of Md.
Richard Jordan Hancock, Jr.—Student of Law, Washington and Lee Univ.
Stephen Cloud Harry.—Graduate Student.
Thomas Wood Hastings.—Student of Medicine.
Conrad Augustine Hauser.—Student of Theology, Lancaster, Pa.
Herman Frederick Krafft.—Classical Instructor, New York City.
Harry Taylor Marshall.—Student of Medicine.
George Stevens Maynard.—General Electric Co., Schenectady, N. Y.
Louis Wardlaw Miles.—Student of Medicine, Univ. of Md.
William Albert Nitze.—Graduate Student.
James Piper.—Student of Law, Univ. of Md.
John Eugene Howard Post.—Graduate Student.
John Hurst Purnell.—Baltimore.
Milton Reizenstein.—University Scholar.
Frank Roy Rutter.—Fellow.
Simon H. Stein, LL. B., Univ. of Md., 1896.—Attorney at Law, Balt.
Emerson H. Strickler.—Chemist, Balt.
Joseph Pembroke Thom, Jr.—Baltimore.
George Harvey Trull.—Student, Princeton Theol. Sem.
Clinton Gambrill Tudor.—Civil Engineer, Baltimore.
Malcolm Van Vechten Tyson.—Student of Law, Univ. of Md.
Horace Scudder Uhler.—Instructor in Physics, Academy of Northwestern Univ.
George Talbot Whitfield.—Attorney at Law, Baltimore.
Pere Lethrbury Wickes, Jr.—Student of Law, Univ. of Md.
*Chester Clark Wood. * *September* 11, 1895.
James Curtis Ballagh, (*extra ordinem*), Ph. D., 1895.—Instructor in History.

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1895.

Wilbur Withrow Ballagh.—Tenafly, N. J.
William Sherman Bansemer.—Student of Law, Univ. of Md.
Harry Bissing.—Electrician, New York.
Hanson Briscoe Black.—Student of Law, Frederick, Md.
Charles Henry Hardin Branch.—Student, Princeton Theol. Sem.
George Dobbin Brown.—Graduate Student.
Lawrason Brown.—Student of Medicine.
Humphrey Warren Buckler.—Student of Medicine.
William Mack Chowning, S. B., Knox, 1894.—Teacher, Rock Island, Ill.
Charles Bevan Clark.—Student, Mass. Inst. of Tech.
Gilbert Abraham Coblens.—Baltimore.
Reuben Carll Foster.—Student of Law, Univ. of Md.
Frank Taylor Fulton, S. B., Knox, 1894.—Student of Medicine.
James Daton Gallagher.—Student of Medicine.
George Herbert Gray.—Baltimore.
Milton Daniel Greenbaum.—Student of Law, Univ. of Md.
Roland Bridendall Harvey, LL. B., Univ. of Md., 1896.—New York City.
George Oscar James.—Instructor in Physics, Univ. of Utah.
Stuart Symington Janney.
Marcus Kaufman.—Student of Law, Univ. of Md.
Charles Alexander Kilvert.—Providence, R. I.
Ernest Pendleton Magruder.—Supt. of Schools, Williamsport, Md.
Edward Spiller Oliver.—Student of Medicine.
John Donaldson Parker.—Student of Law, Univ. of Md.
David Sterrett Pindell.—Graduate Student.
Jacob Hall Pleasants, Jr.—Student of Medicine.
Gustav Rudolph Poetter.—Student of Theology, Lancaster, Pa.
John Andrew Robinson.—Baltimore.
Sylvan Rosenheim.—Student of Medicine.
Charles Albert Savage.—Graduate Student.
Edgar Randolph Strobel.—Student of Medicine.
Robert McIlvaine Torrence.—Pittsburg, Pa.
Campbell Easter Waters.—Graduate Student.
Rev. Arthur Charles Watkins.—Clergyman, Auburn, N. Y.
Henry Abel Whitaker.—Teacher, Norristville, Md.
William Whitridge Williams.—Student of Medicine.
William Wingert.—Student of Law, Univ. of Md.

(37)

1896.

Thomas Sewell Adams.—University Scholar.
Cornelius Beatty.—Graduate Student.
Augustus Caesar Binswanger.—Baltimore.
Charles Edward Caspari.—University Scholar.
Clarence Carroll Clark.—University Scholar.
Rev. Frank Wilbur Collier.—Clergyman, Boston, Mass.

Charles Edward Diehl.—Teacher, Berryville, Va.
William Reginald Dorsey.—Student of Law, Univ. of Md.
George Dyre Eldridge, Jr.—Student of Law, Columbia.
Albert Dale Gantz.—Student, Princeton Theol. Sem.
Alfred Dearing Harden.—Student of Law, Columbia.
William Faithful Hendrickson.—Student of Medicine.
*Frank Holmes Johnson. **June* 20, 1896.
Charles Harwood Knight.—Cleveland, O.
William Kurreimeyer.—University Scholar.
Robert Lacy.—Student, Mass. Inst. of Tech.
Henry Lanahan.—Portsmouth, Va.
Monroe Luchs.—Washington, D. C.
Arthur Webster Machen, Jr.—Student of Law, Harvard.
Richard Elliott Marine.—Graduate Student.
Henry Pickering Parker.—Baltimore.
Albert Cabell Ritchie.—Student of Law, Univ. of Md.
Louis Rosenbaum.—Baltimore.
Glanville Yeisley Rusk.—Student of Medicine.
Laurence Frederick Schmeckebier.—University Scholar.
James Eustace Shaw.—Graduate Student.
St. George Leakin Sioussat. — University Scholar.
Alexander Raymond Stevens.—U. S. Geological Survey, Indian Terr.
John Wesley Richardson Sumwalt.—University Scholar.
John Hanson Thomas.—Baltimore.
Charles Burnet Torsch.—Baltimore.
James McConky Trippe.—Student of Law, Univ. of Md.
Charles William Waidner.—Graduate Student.
William Fisher Wallis.—University Scholar.
Frederick Howard Warfield.—Teacher, Baltimore.
John Armistead Welbourn.—Student, Va. Theol. Sem.
John Montgomery West.—Student of Medicine. (37)

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9. Proficients in Applied Electricity.

(When the institution is not named, the Johns Hopkins University is to be understood. (F) indicates that the person has held a Fellowship here. *—Died.)

1888.

Cary Talcott Hutchinson, (F), Ph. B., Washington Univ., 1886, Ph. D., 1889.—Consulting Electrical Engineer, N. Y.
Joseph Lee Jayne, U. S. Naval Acad., 1882.—Lieutenant, U. S. Navy; Bureau of Electricity, Navy Dept., Washington.
Henry Hazlehurst Wiegand, A. B., 1885.—Electrician, Baltimore.
Gilbert Wilkes, U. S. Naval Acad., 1881, Lecturer, Univ. of Wis., 1892-94.—Consulting Electrical Engineer, Detroit. (4)

1890.

William Julian Albert Bliss, A. B., Harvard, 1888, Assistant, 1890-91, Ph. D., 1894. Lecturer, 1894-95, Instructor, Woman's Coll., Balt., 1894-95.—Assistant in Physics.
James Shaler Hodges, A. B., 1886.—Electrical Engineer, Baltimore. (2)

1892.

*Ezra Carl Breithaupt, late Electrical Engineer, Berlin, Ont. **January* 27, 1897.
William Hand Browne, Jr., A. B., 1890.—Instructor in Electricity, Univ. of Neb.
*Henry Wakefield Frye, A. B., Colby, 1889, late Associate Editor, *Electrical World*. **June* 20, 1895.
George Henry Hutton, Jr.—Electrician, Baltimore.
Robert Ernest Hutton.—Electrician, Lexington, Va.
Norman Crawford McPherson, A. B., Pa. Coll., 1889.—Westinghouse Electric Co., Pittsburg.
Hugh Pattison.—Electrician, New York.
Charles William Waidner, A. B., 1896.—Graduate Student.
Arthur Judson Warner, A. B., Marietta, 1889. (9)

1893.

Louis Minturn Aspinwall.—Westinghouse Electric Co., Pittsburg.
Shellman Baer Brown, A. B., 1891.—Railroad Superintendent, Baltimore.

Sidney Hand Browne, A. B., 1891.—Electrical Engineer, Baltimore.

Eugene Russell Carichoff, A. M., Washington and Lee, 1885.—Sprague Electric Elevator Co., New York.

Howard Waters Doughty.—Baltimore.

Harold Mills Dyar, Ph. B., Marietta, 1888.—Electrical Engineer, Marietta, O.

Irenus Kittredge Hamilton, S. B., Trinity (Conn.), 1891.—Chicago, Ill.

William Winder Handy, S. B., Haverford, 1891.—Baltimore.

Charles Roy McKay.—Electrical Engineer, Salt Lake City, Utah.

William Robinson Mollnard.—Consulting Engineer, Baltimore.

*Arthur Lacy Reese, Electrician, Maryland Steel Co., 1893-94. * *March* 13, 1894.

Arthur John Rowland.—Professor of Electrical Engineering, Drexel Institute.

William Frederick Schulz.—Baltimore.

Robert Isaac Todd.—Railroad Supt., Washington, D. C.

John Boswell Whitehead, Jr.—Niagara Falls, N. Y. (15)

1894.

William Pierce Anderson, A. B., Harvard, 1892.—Student in Paris, France.

John Woodside Corning.—Electrician, Boston, Mass.

Lewis Warrington Cottman.—Electrician, Baltimore.

Harvey Cavendish Darrell.—Electrician, Baltimore.

Peter Conover Hains, Jr., U. S. Naval Acad., 1893.—Baltimore.

Stephen Quentin Hayes, A. B., Georgetown (D. C.), 1892.—Westinghouse Electric Co., Pittsburg.

Douglas Alexander Howard, U. S. Mil. Acad., 1878.—Captain (retired), U. S. A.

Andrew Ellicott Maccoun.—Electrician, Carnegie Steel Co.

James Warren McCrosky, S. B., Univ. of Neb., 1891.—Westinghouse Electric Co., Pittsburg.

Henry Hutchinson Norris.—Instructor in Electricity, Cornell Univ.

Charles Edward Phelps, Jr.—Electrician, Baltimore.

Alfred Magill Randolph, Jr., A. B., 1891.—Westinghouse Electric Co., Pittsburg.

Samuel Reber, U. S. Mil. Acad., 1886, First Lieut., U. S. A.—Instructor, Signal Service, Fort Riley, Kansas.

Franklin Roberts.—Electrician, Baltimore.

Theodore Straus.—General Electric Co., Schenectady.

John Saunders Taylor.—Student, University of Virginia.

Frank McStocker Thomas.—Westinghouse Electric Co., Pittsburg.

Wallace Durant White.—Electrical Engineer, New York Cy.

James Watts Young.—Electrician, N. Y. (19)

1895.

Harry Bissing, A. B., 1895.—Electrician, New York.

Byron Briggs Brackett, A. B., Syracuse, 1890.—Graduate Student.

Benjamin Harrison Branch.—Instructor in Electricity, Balt. Polytech. Inst.

Edson Fessenden Gallaudet, A. B., Yale, 1893, Ph. D., 1896.—Westinghouse Electric Co., Pittsburg.

George Henry Hill, A. B., Williamsport Dickinson Sem., 1891.

Alexander McIver, Jr., A. B., Univ. of N. C., 1890.

Joseph Mullen, Jr.—Electrician, Baltimore.

Charles Reutlinger.—Electrician, Baltimore.

John Jacob Rothermel, A. B., Franklin and Marshall, 1893.—Graduate Student.

Frank Semple Wilcox, S. C. Mil. Acad., 1893. (10)

1896.

Matthew Maury Corbin.

Isidor Deutsch.—Electrician, Baltimore.

Hugh Miller Frazer, S. B., Ky. State, 1889.—Electrician, Lexington, Ky.

James Holdsworth Gordon, Jr.—Electrician, New York.

Horace Marshall Harriman, Jr.—Electrician, Baltimore.

Malcolm Westcott Hill.—Student, Cornell Univ.

George Harwood Hodges.—Electrician, New York.

Jasper Alan McCaskell, S. B., Loyola, 1895.—Chicago, Ill.

George Stevens Maynard, A. B., 1894.—General Electric Co., Schenectady.

Henry Todd Powell.—Electrician, Baltimore.

Charles Leonard Reeder.—General Electric Co., Schenectady.

Martin Schwab.—Baltimore.

James Mowton Saunders Waring.—Electrician, Baltimore. (13)

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10. Recipients of Prizes, 1887-97.

Literary Prizes.

1887.

Richard Eugene Burton, A. B.....$100
James Cummings, A. M.....$100

John Marshall Prize.

1892.

Henry C. Adams, Ph. D.
Charles H. Levermore, Ph. D.
John M. Vincent, Ph. D.
Woodrow Wilson, Ph. D.

1893.

Charles M. Andrews, Ph. D.

1894.

Amos G. Warner, Ph. D.

1895.

Albert Shaw, Ph. D.

1896.

Westel W. Willoughby, Ph. D.

Scharf-Birney Prize.

1892.

Frank Wilson Blackmar, Ph. D.....$100

Institutional History Prize.

1892.

Charles McLean Andrews, Ph. D..... $50

Prizes for English Composition.

1. *Offered to Matriculated Students.*

1894.

Wilbur Withrow Ballagh.....$100

2. *Offered to Matriculated Students entering in* 1893.

1894.

Charles Burnet Torsch..... $30
Arthur Webster Machen, Jr..... $20

3. *Offered to Matriculated Students entering in* 1894.

1896.

Charles Keyser Edmunds $30

4. *Offered to Bachelors of Arts of this University.*

1895.

William Stuart Symington, Jr., A. B., 1891.....$100

1896.

James Curtis Ballagh, A. B., 1894.....$100

5. *Offered to any Graduate Student of this University.*

1896.

Guy Carleton Lee, A. B.....$100

Prize for Public Speaking.

Offered to Matriculated Students.

1895.

Arthur Charles Watkins..... $50

Prize Offered to Students of Chemistry.

1895.

Ebenezer Emmet Reid, A. M.....$100

11. Libraries.

1. The University Library numbers 80,000 volumes, selected with special reference to the instruction here given. It is arranged in several collections, of which these are the chief:

General Reference.	Classical.
Historical and Political.	Oriental Languages.
Mathematical and Physical.	Romance and Teutonic Languages.
Chemical.	The McCoy Art Library.
Biological.	Library of Southern History.
	Medical.

The reference library and reading room is open daily from 9 a. m. to 6 p. m.; the other rooms in accordance with special regulations.

The Library receives the publications of the leading scientific societies of the world and the chief literary and scientific periodicals. The whole number of serials received exceeds one thousand. This list is supplemented by those of the Peabody Institute and other institutions, so that the whole number of journals accessible (exclusive of ephemeral publications) exceeds twelve hundred. Important books are received by the library as soon as published, by purchase or by the courtesy of dealers.

2. The Peabody Library is a choice collection of books purchased since 1866. It is particularly full in academic transactions, long historical series, and costly illustrated books. It numbers 125,000 volumes, well bound, catalogued, and arranged. It is open daily, without charge, from 9 a. m. to 10.30 p. m.

3. The Enoch Pratt Free Library numbers over 177,000 volumes, and is open daily, without charge.

4. The Maryland Historical Society Library contains 30,000 volumes of historical works, and is open daily.

5. Other libraries of Baltimore are the New Mercantile Library (45,000 volumes), the Bar Library (15,000 volumes), the Medical and Chirurgical Library (6,600 volumes), the Maryland Episcopal Library (20,000 volumes), and the Library of the Maryland Institute (21,000 volumes).

6. Washington is so near that its museums and libraries may be easily visited. Among the chief institutions of interest to students are these:

The Smithsonian Institution and National Museum.
The Library of Congress.
The Army Medical and Surgical Museum and Library.
The U. S. Coast and Geodetic Survey.
The U. S. Geological Survey.
The U. S. Naval Observatory.
The Libraries of the Departments and Bureaus.
The Corcoran Art Gallery.

12. Regulations of the Treasurer's Office.

I. The Treasurer's Office is open daily from 9 a. m. to 4.15 p. m.

II. All bills should be presented at that place, endorsed as correct by the person under whose authority the expense has been incurred.

III. No member of the Academic Staff is allowed to incur a bill in the name of the University, unless authority is given for the same by the Trustees, in advance—either as an item in the annual budget, or as a special appropriation. Blank forms of application are provided for special requisitions.

IV. Orders for books and apparatus to be imported from Europe will not be considered authorized unless countersigned by the President or the Treasurer of the University.

All goods must be consigned to and addressed "Johns Hopkins University, Baltimore, Md." Goods for other parties (societies or individuals) must not be included in the University cases. Invoices, sworn to before the U. S. Consul, must be sent by mail, and a duplicate invoice by the following mail, both addressed to the Johns Hopkins University.

Unless otherwise ordered, goods from Europe should be sent as follows:

From Germany by the North German Lloyd steamers sailing for Baltimore from Bremen; from England by steamship lines from Liverpool to Baltimore; from France and Italy, via Havre and Liverpool.

Printed copies of instructions to shippers, which can be obtained at the Treasurer's Office, should in all cases be enclosed with the orders.

V. The Treasurer's Office will make purchases, at wholesale rates, of supplies which are required for the current needs of the University.

VI. Such pass-books as are authorized by the Treasurer should be presented for balance and settlement every month.

VII. The wages of all persons employed by the University will be paid at the Treasurer's Office.

VIII. When C. O. D. packages are expected, previous arrangements should be made for their reception.

IX. Outlays made for individuals (express parcels, postage, telegraph messages, etc.) should be settled at once.

X. An annual allowance is made by the Trustees, in the budget, for such expenses as they approve, and in deciding on the items they are governed by a consideration of the general interests of the University, as well as by the needs of special branches of instruction. Balances to the debit or credit of any account are carried forward to the new account, at the opening of each financial year (September 1). A statement of the amount of the balance and of any additional appropriation will be communicated to the parties severally interested, if requested, after the Trustees' meeting in October.

FRANCIS WHITE,
Treasurer.

13. PUBLICATIONS ISSUED AT THE JOHNS HOPKINS UNIVERSITY.

The following serials are regularly issued under the auspices or with the aid of the Johns Hopkins University and the Johns Hopkins Hospital:

I. American Journal of Mathematics.

This journal was commenced in 1878, under the editorial direction of Professor Sylvester. It is now conducted by Professor Craig as Editor, with the coöperation of Professor Simon Newcomb. Eighteen volumes of about 400 pages each have been issued, and the nineteenth is in progress. It appears quarterly. Subscription $5 per year. Single numbers $1.50.

II. American Chemical Journal.

This journal was commenced in 1879, with Professor Remsen as Editor. Eighteen volumes of about 450 pages each have been issued, and the nineteenth is in progress. Ten numbers are issued yearly. Subscription $4 per year. Single numbers 50 cents.

III. American Journal of Philology.

The publication of this journal commenced in 1880, under the editorial direction of Professor Gildersleeve. Sixteen volumes of about 570 pages each have been issued, and the seventeenth is in progress. It appears four times yearly. Subscription $3 per volume. Single numbers $1.

IV. Studies from the Biological Laboratory.

(Including the Chesapeake Zoölogical Laboratory.)

The publication of these papers commenced in 1879, under the direction of Professor Martin, with the assistance of Professor W. K. Brooks. Four volumes of about 500 pages, octavo, and 40 plates each, have been issued.

V. Studies in Historical and Political Science.

The publication of these papers was begun in 1882, under the editorial direction of Professor H. B. Adams. Fourteen series are now completed and the fifteenth series in progress. Fourteen extra volumes have also been issued. Subscription $3 per volume. A set, including the fifteen regular series and the fourteen extra volumes, will be sold for sixty-three dollars.

VI. Memoirs from the Biological Laboratory.

These monographs are issued under the editorial direction of Professor W. K. Brooks. Volume III was issued in 1894. Price for the set of three volumes twenty-five dollars.

VII. Johns Hopkins University Circulars.

The publication of these Circulars began in December, 1879, and 129 numbers have since been issued. Subscription $1.00 per year.

VIII. Contributions to Assyriology and Comparative Semitic Philology.

The publication of this journal was begun in 1889. Professor Paul Haupt, of the Johns Hopkins University, and Professor Friedrich Delitzsch, of the University of Breslau, are the editors. Volume III is in progress.

IX. The Johns Hopkins Hospital Reports.

These reports are edited by the Faculty of the Johns Hopkins Medical School and published for the Johns Hopkins Hospital. Their publication was begun in 1890. Volume VII is in progress. Price $5 per volume. The set of seven volumes will be sold for thirty-five dollars.

X. The Johns Hopkins Hospital Bulletin.

The publication of these Bulletins began in 1889. Volume VIII is in progress. They are published monthly. Subscription $1.00 per year. The set of eight volumes will be sold for thirteen dollars.

XI. Modern Language Notes.

This journal is edited by Professor A. M. Elliott and his associates in the Modern Language Department. It appears monthly. The twelfth volume is in progress. Price $1.50 per year.

XII. The Journal of Experimental Medicine.

The publication of this journal was begun in 1896. Professor W. H. Welch is the principal editor. It appears six times yearly. Volume II is in progress. Price $5 per year.

XIII. Annual Report,

Presented by the President to the Board of Trustees, reviewing the operations of the University during the past academic year.

XIV. Annual Register,

Giving the list of the officers and students, and containing detailed statements as to the regulations and work of the University.

Announcements of the Graduate, Collegiate, and Medical Courses of Instruction are issued yearly and will be sent on application.

The principal separate publications that have been issued under the auspices or with the aid of the University, are:

PHOTOGRAPHS OF THE NORMAL SOLAR SPECTRUM. By Professor H. A. Rowland. Set of ten plates, $20.

These consist of ten plates, each 3x2 feet, containing two strips of the spectrum, and extending from wave-length 3000 to wave-length 6950. Concave gratings having 10,000 to 20,000 lines to the inch, made in the Physical Laboratory of the University, were used in making these photographs.

A NEW CRITICAL EDITION OF THE HEBREW TEXT OF THE OLD TESTAMENT. Now in progress. Prospectus on application.

A COMPLETE FACSIMILE EDITION OF THE TEACHING OF THE APOSTLES. 110 pages quarto and 10 plates. $5.00.

STUDIES IN LOGIC. 210 pages, 12mo. $2.00.

ESSAYS AND STUDIES. By Basil L. Gildersleeve. 520 pages, 4to. $3.50.

REPRODUCTION OF A SYRIAC MANUSCRIPT OF THE ANTILEGOMENA EPISTLES. 17 phototype pages. $3.00.

EMBRYOLOGY OF INSECTS AND ARACHNIDS. By Adam T. Bruce. 50 pages, 4to, and 7 plates. $3.00.

GEOLOGY AND PHYSICAL FEATURES OF MARYLAND. By G. H. Williams and W. B. Clark. $1.00.

TOPOGRAPHICAL AND GEOLOGICAL MAPS OF THE VICINITY OF BALTIMORE. $1.00 each.

THE CONSTITUTION OF THE EMPIRE OF JAPAN. 50 cents.

DESCRIPTION OF THE JOHNS HOPKINS HOSPITAL. 116 pages, 4to, and 56 plates. $7.50.

JOHNS HOPKINS HOSPITAL PLANS. $5.00.

SELECTIONS FROM THE EARLY SCOTTISH POETS. By William Hand Browne. $1.25.

A MONOGRAPH ON THE GENUS SALPA. By W. K. Brooks. 400 pages and 57 plates. $7.50.

THE OYSTER. By W. K. Brooks. 240 pages and 12 plates.

BIBLIOGRAPHIA HOPKINSIENSIS. A list of publications by members of the University. Now in progress.

DISSERTATIONS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN THE JOHNS HOPKINS UNIVERSITY.

14. Scientific Societies.

1. The Scientific Association, meeting under the presidency of Professor Remsen.

2. The Philological Association, meeting under the presidency of Professor Gildersleeve.

3. The Mathematical Society, of which Professor Craig is the director.

4. The Historical and Political Science Association, of which Professor Adams is the director.

5. A Naturalists' Field Club, which makes weekly excursions during the spring and autumn and holds monthly meetings for the presentation and discussion of papers.

There are also companies which meet weekly in the laboratories for the reading of the scientific journals, and seminaries in several departments of study.

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15. Historical Statement.

The Johns Hopkins University was founded by the munificence of a citizen of Baltimore, Johns Hopkins, who bequeathed the most of his large estate for the establishment of a University and a Hospital. The foundation of the University is a capital in land and stocks, estimated in value at more than $3,000,000; the capital of the Hospital is not less in amount.

1867, August 24.	Incorporation of the Johns Hopkins University.
1870, June 13.	Organization of the Board of Trustees.
1873, December 24.	Death of the Founder [born May 19, 1795].
1874, February 6.	First Business Meeting of the Trustees.
1874, December 30.	Election of a President of the University.
1876, February 22.	Inauguration of the President.
1876, October 3.	Instruction of Students began.
1886, April 26.	Celebration of the Tenth Anniversary.
1889, May 7.	Opening of the Johns Hopkins Hospital.
1893, October 1.	Opening of the Johns Hopkins Medical School.

MATRICULATION EXAMINATIONS, 1897.

Tuesday, June 8, and Wednesday, September 29.

9-10 a. m.—History.
10-11 a. m.—Science.
11 a. m.-1 p. m.—English.
3-6 p. m.—Latin.

Wednesday, June 9, and Thursday, September 30.

9-11 a. m.—Arithmetic and Algebra.
11 a. m.-12 m.—French and German (*elements*).
3-6 p. m.—Plane and Solid Geometry.

Thursday, June 10, and Friday, October 1.

9-10.30 a. m.—Trigonometry.
10.30 a. m.-12 m.—Analytic Geometry.
3-6 p. m.—Greek.
3-6 p. m.—French and German (*minor courses*).
3-4 p. m.—French (*elements*).

CALENDAR, 1897-98.

The first Examinations for Admission and Matriculation begin Tuesday, June 8, 1897, at 9 a. m.

Commencement Day falls on Tuesday, June 15, 1897.

The present academic year closes June 15, 1897.

The twenty-second academic year begins October 1, 1897, and continues till June 15, 1898.

The Autumn Examinations for Admission begin Wednesday, September 29, 1897, at 9 a. m.

The Christmas Recess begins Friday, December 24, 1897.

Exercises will be resumed Monday, January 3, 1898.

Commemoration Day falls on Tuesday, February 22, 1898.

The Spring Recess begins Thursday, April 7, and closes Wednesday, April 13, 1898.

STATEMENTS IN RESPECT TO THE COURSES OF INSTRUCTION.

The Faculty of Philosophy in the Johns Hopkins University was organized in 1876 for the instruction of young men in languages, literature, and science.

The Faculty of Medicine was fully organized in 1893 for the instruction of young men and young women who desire to proceed to the degree of Doctor of Medicine.

In the Faculty of Philosophy, the instruction is carried on by university methods and by collegiate methods corresponding with the requirements of students at different stages of their advancement. University instruction is offered to those who have already taken an academic degree, or who have otherwise fitted themselves to pursue advanced courses of study. Collegiate instruction is offered to undergraduates, who have the choice of several prescribed courses of study, all of them leading up to the degree of Bachelor of Arts.

In the Faculty of Medicine, students who have acquired a liberal education by a course of study that included chemistry, physics, and biology, with French and German, are received; and a four years' systematic course, with special opportunities for laboratory work and for clinical observation, is provided for them. Those who have already received the degree of Doctor of Medicine are admitted as attendants on lectures.

FACULTY OF PHILOSOPHY.

Advanced and graduate students are received with or without reference to their being candidates for a degree, and they are permitted to attend such lectures and exercises as they may individually select. On entering the University they are expected to present their diplomas and certificates from the institutions with which they have been connected, and also letters of introduction. They are not examined for admission by the University, but each instructor satisfies himself of the attainments of those who wish to follow his guidance before admitting them to his classes.

The professors are free to give personal counsel and instruction to those who seek it; books and instruments adapted to investigations and advanced work have been liberally provided; the system of fellowships secures the presence of twenty special students imbued with the university spirit, most of them looking forward to academic careers; seminaries limited to a few advanced students under the guidance of a director have been organized in various subjects; societies devoted to philology, to mathematical, physical, and natural science, and to history and political science, afford opportunities for the presentation of memoirs and original communications, and there are also clubs for the reading and discussion of philological, biological, physical, and chemical papers; during the year courses of lectures are given by resident and non-resident professors on topics to which they have given special attention; the libraries of the Peabody Institute and Maryland Historical Society, founded for the advantage of scholars, are easily accessible; the issuing, under the auspices of the Trustees, of publications devoted to mathematics, chemistry, philology, biology, the modern languages, and history brings the University into advantageous connection with other foundations; and the University reading-room, which is constantly open, is liberally supplied with new and with standard books and with the literary and scientific journals of this and other lands.

Instruction is carried on in the different departments by

methods which vary with the nature of the subject and the character and proficiency of the scholars; but in all alike the aim is the same,—that, while the student is becoming familiar with the work prosecuted and the results attained elsewhere, and is adding to his general intellectual culture, he may be encouraged to become himself an independent and original investigator in his chosen field of labor. Within reasonable limits the University will provide such books, apparatus, and material as may be requisite for this purpose.

The principal subjects in which advanced instruction is now provided are these:

Greek.
Latin.
Sanskrit and Comparative Philology.
Semitic Languages.
Anglo-Saxon and English.
German.
Romance Languages.
History.
Political Economy.
Comparative Jurisprudence.
History of Philosophy.
Mathematics.
Astronomy.
Physics, including Applied Electricity.
Chemistry.
Geology, Mineralogy, and Petrography.
Biology, including Physiology and Morphology.
Pathology.

Greek.

The graduate instruction in Greek is directed by Professor Gildersleeve, in connection with the Greek Seminary, which consists of the Director, Fellows, and Scholars, and such advanced students as have satisfied the director of their fitness for an active participation in the work by an essay, a critical exercise, or some similar test of attainments and capacity. All graduate students, however, may have the privilege of attending the Seminary exercises.

Each regular member is required to take his turn as interpreter, critic, analyst, and special fields of research are assigned according to progress or bent. It may be added that, while the Seminary demands a large portion of the student's time, the requirements are not so great as to preclude independent

study in other directions, and care is taken so to direct the private reading that in the usual period of preparation for the higher degree a comprehensive knowledge of Greek literature and Greek life may be gained.

By these arrangements the students are brought into closer relations with the professor and encouraged to perform more independent work and engage in more extended experiments than would be possible on a system of mere recitation or the simple hearing of lectures.

The cycle which has been followed for some years is made up of the Greek Historians, the Attic Orators, Plato, Aristophanes. For example:

1893-94. Plato.	1895-96. Greek Historians.
1894-95. Aristophanes.	1896-97. Attic Orators.

The methods followed have been described in successive annual reports, which may readily be consulted.

The work in the Seminary during the current year was concentrated on the Attic Orators; for the next year the centre of work will be transferred to Plato.

In addition to the work of the Seminary (two meetings a week), courses of lectures are given by the Director and by other qualified persons. For example, during the year 1896–97, Professor Gildersleeve gave a course on the Attic Orators and a series of conferences on Greek Rhetoric and Greek Lyric Poetry, lectured once a week during the year on the Syntax of the Compound Sentence, and twice weekly during the first quarter directed a course of practical exercises in Greek Composition and extemporaneous translation from the Greek. Dr. C. W. E. Miller, Associate in Greek, conducted auxiliary readings in the Attic Orators and in Aristotle's Rhetoric twice a week from January to the end of the session.

Undergraduate students who select the classical group of studies are required to follow the class-work in Greek, four hours weekly through two years. The texts read vary from year to year, including selections from poets, historians, and orators. Exercises in Greek composition and in reading at sight are likewise required. To extend the acquaintance of

the student with Greek literature, he is obliged to read by himself certain prescribed authors, and to pass an examination upon them. An elective course of two hours a week for a half-year is also provided. The instruction of the undergraduates in Greek is conducted chiefly by Associate Professor Spieker.

The American Journal of Philology, edited by Professor Gildersleeve, has completed its sixteenth volume, and the seventeenth is now in progress.

Latin.

Instruction in Latin is given on a plan similar to that already mentioned as followed in the courses in Greek. The advanced work proceeds through the organization of a Seminary, of which Professor Warren is the Director. The instruction has two distinct ends in view. It aims first to give to students a wider and more accurate knowledge of the Latin language and literature than can be secured in the ordinary college course, so that they may become more efficient teachers; and, secondly, to train them in the methods of scientific research, so that they may become independent investigators. It is not believed, however, that these two ends can be kept separate. On the contrary, the most enthusiastic teacher is likely to be one who is thoroughly imbued with the scientific spirit. Accordingly, the most important instrument of training is the Latin Seminary, which meets twice a week during the year. Each year some author or a group of closely connected authors is made the centre of work. Critical methods are taught, interpretations are prepared by members of the Seminary in turn, and papers are read by them containing the results of special investigations on the syntax and style of authors and on other themes, literary and linguistic. The subjects treated during the last four years have been as follows:

1893-94. Cicero's Orations and Letters.
1894-95. Roman Satire, especially Horace and Juvenal.
1895-96. The Roman Historians, especially Livy and Tacitus.
1896-97. The Roman Epic, especially Vergil.

Courses of lectures are also given from time to time by the Director of the Seminary. For example, in 1896–97, Dr. Smith, who, in the absence of Professor Warren, acted as Director, lectured on the Ancient Commentators to Vergil once a week during the first half-year, on the Roman Hexameter once a week during the second half-year, and on the Roman Epic Poets once a week during the year. Throughout the year a Journal Club met every two weeks to report and discuss recent philological publications in the field of Latin. A class, meeting once a week in the first half-year, read selections from Macrobius, and in the second half-year selections from Lucan.

The undergraduate work in Latin varies somewhat according to the group of studies chosen. The works read differ year by year, but are so chosen that the student may become acquainted with historical, poetical, and philosophical authors. His work in the class-room must be supplemented by a prescribed course of reading which he follows privately and on which he undergoes an examination. Latin composition and sight-reading form a part of the course. Associate Professor Smith and Dr. H. L. Wilson assist in this work.

Sanskrit and Comparative Philology.

Courses of instruction under the direction of Professor Bloomfield are provided in the Indo-Iranian languages (Vedic and Classical Sanskrit, Pāli-Prākrit, Avestan or Zend, and Old Persian), in comparative grammar of the Indo-European languages, in historical ethnology of the Indo-European peoples, in general linguistic science. During the session of 1897–98 a course in the Lithuanian language and literature will be offered for the first time, and instruction in one or the other of the ancient languages of the Balto-Slavic (Lithu-

Slavic) family may be hereafter expected as a regular feature of the work of the department.

These instructions aim to meet the wants of those who wish to devote themselves to the study of these branches exclusively and for their own sake, *i. e.*, those who wish to become specialists in Sanskrit philology, or comparative philology; and also the wants of students of languages in general, who wish to obtain a broader linguistic basis for special studies in other departments of philology.

The advanced work aims especially to meet the wants of those who wish to make Indian philology or comparative philology their special study. Instruction is given by practical exercises, lectures, seminary work, and, where possible, the use of native Sanskrit manuscripts. The seminary is furnished with a carefully selected library, and approximately complete sets of the Oriental journals, as well as the journals in comparative philology, are freely accessible in the main library.

A prolonged course in Sanskrit, involving two lectures a week during two years and attendance in the Vedic Seminary for a half-year (one hour a week), is planned so as to furnish a good knowledge of classical Sanskrit, and to include an introduction into the dialect of the Vedas. This amount of work represents material sufficient for the first subsidiary subject for the degree of Doctor of Philosophy. A course in the same study for one and a half years, involving two hours a week, is the amount required for a second subsidiary subject leading to the same degree.

A synopsis of the courses offered during recent years may be presented under four heads:

I. Courses in the general principles of comparative philology or linguistic science, and on special chapters thereof; lectures on ethnology.

II. Courses in the general comparative grammar of the Indo-European languages; comparative grammar of Sanskrit and Zend; comparative study of Greek accent; comparative study of Greek, Latin, Sanskrit, and Teutonic, including vocalism, consonantism, noun-formation, and inflections.

III. The Vedic, Sanskrit, and Prākrit dialects: Rig-Veda; Atharva-Veda; literature of the Brāhmanas and Upanishads. The law-books of Manu and Yājñavalkya; Çakuntala and introduction into Prākrit; Hitopadeça, Kathāsaritsāgara, and Nala. Sanskrit grammar and prose-composition.

IV. The Avestan language and the literature of the Avesta.

During the session of 1896–97 the Vedic Seminary was engaged in the critical study of the Atharva-Veda and its accessory literature (Kāuçika-sūtra, etc.). The Director's translation of the Atharva-Veda (Hymns of the Atharva-Veda, together with extracts from the Ritual Books and the Commentaries: Sacred Books of the East, volume xlii), published during the year, was made the basis of further criticism. During the session of 1897–98 the Literature of the Brāhmaṇas will be studied in its relation to the Vedic hymns.

An advanced course of readings from the Avesta; an elementary course in Vedic Sanskrit; readings from classical Sanskrit texts; and an elementary course in classical Sanskrit, consisting of a searching review of the grammar of the language and the reading of an easy text, were the main features of the instruction in Indo-Iranian languages. Mr. J. A. Ness, Fellow in Sanskrit, lent his assistance in some of the courses.

In Comparative Philology the work was two-fold. First, a course in the general principles of linguistic science, together with an exposition and criticism of modern methods in scientific grammar. This was prefaced by an ethnological sketch of the principal divisions of the Indo-European family. Secondly, a course of lectures during the year on the consonants of the Indo-European languages, with special reference to Greek, Latin, and Teutonic. This is to be followed the next session by a corresponding treatment of Indo-European noun-formation.

Oriental Seminary.

In the Oriental Seminary, of which Professor Haupt is Director, both introductory and advanced instruction is provided in Oriental history and archæology, as well as in the

principal Semitic languages, *viz.*, Hebrew (both Biblical and Talmudic), Biblical Aramaic, Syriac, Arabic (both classical and modern), Ethiopic, etc., and in Assyriology in its various branches (Assyro-Babylonian and Sumero-Akkadian). In the organization adopted in 1883, a course of three years was arranged. The centre of work is the Old Testament, special attention being given to the critical study of Biblical texts and the cuneiform inscriptions bearing on the Scriptures. Professor Haupt is assisted by Dr. Christopher Johnston.

The various courses are adapted to the requirements of four classes of students, namely: (*a*) students of theology wishing to obtain a thorough acquaintance with the sacred tongue and its sister idioms as a means of elucidating Scripture and problems of the comparative history of religion; (*b*) students of linguistics intending to make comparative grammar of the Semitic languages their specialty; (*c*) students of Oriental history and archæology desirous of drawing directly from the original sources; (*d*) persons looking for instruction in the living Oriental languages (as modern Arabic or Turkish) for practical purposes.

In these various courses, the seminary method is followed throughout, the student being from the first brought face to face with the several idioms, without long theoretical introductions. Stress is laid on a thorough grammatical training, imparted in connection with the minute philological analysis of some selected text in the respective languages, printed grammars serving only for occasional reference.

A room has been set apart containing a well-equipped working library for all the branches of Oriental research (including the library of the late Professor A. Dillmann, of Berlin), and some advanced students are usually present to help in the preparation for the recitations conducted by the Director of the Seminary, and to furnish any other aid that may be desired.

English.

The instruction in English is given by Dr. James W. Bright, Professor of English Philology, Dr. William Hand Browne, Professor of English Literature, and Dr. Herbert Eveleth Greene, Collegiate Professor of English. Graduate and collegiate courses are provided in conformity with the principles followed in the other language departments. Advanced students are instructed in the technical results of linguistic and literary science, and trained in the processes of original investigation. The college work is arranged upon a plan that prescribes for every student a systematic training in English Composition and in a critical study of standard prose. This is followed by an introductory course in English literature which is required of all students except those pursuing the studies of the Modern Language Group (Group VII); and a more advanced course is provided for those who may wish to continue the subject. The work of students in the Modern Language Group includes, first, a general survey of the history of English literature from the earliest times to the present day. After this preliminary course, more definite and minute study is bestowed upon prolonged courses that centre in the most significant periods of that history: these are courses in Anglo-Saxon; in the language and literature of the Middle English Period, and especially Chaucer and his contemporaries; in the Early Scottish Poets; in the Elizabethan period; and in the chief writers of the eighteenth and nineteenth centuries.

Graduate Courses.

The advanced courses in English are so arranged as to enable a student, in three or four consecutive years, to study with precision all the important departments of Grammar and of Literature. Instruction is imparted by lectures, by freer conferences, by the methods of the Seminary, and by classroom recitation. The Seminary (four hours a week) constitutes the chief organ of instruction and research. It supplies means for the inculcation of what is presented in the lectures,

and for organized and prolonged concentration of effort on selected subjects. Usually the work of the Seminary centres each half-year in a different period of the literature, ranging from Anglo-Saxon to the present century. The literature of the period studied is investigated as to its sources, the history of its forms and traditions, and its artistic value, and linguistically the period is studied in its relation to the history of the language. The members of the Seminary also meet as a Journal Club (fortnightly) chiefly for reviewing the current philological (linguistic and literary) periodicals, and recently published books and monographs. As supplementing the lectures and the Seminary, classes are organized for special training in textual criticism. There is also in alternate years an advanced course in the History and Theory of Rhetoric by Professor Greene, and annually a course of lectures on some department of English literature by Professor Browne. Weekly conferences and informal lectures furnish an opportunity for the discussion of many topics not provided for in the regular courses of the year. This hour is also in part occupied by lectures given by the students, who may thus acquire experience in the more formal presentation of the results of special study.

College Courses.

1. *Rhetoric and English Composition.* In this course, which is required of all undergraduates, the principles of good writing are inculcated. The use of text-books is supplemented by lectures and discussions, by weekly practice in the writing of short papers, a few of which are read and criticised in the class-room, and by the writing of longer papers, which are read and criticised privately with the writers. During the first half-year the study is directed to the elements of style,—the word, the sentence, and the paragraph. The weekly practice in writing is combined with an examination of the usage of standard writers. During the second half-year the various forms of composition—description, narration, exposition, and argument—are studied and practiced; the work also includes a critical study of standard prose in its various forms.

2. *English Literature.* The course in Rhetoric is followed by a prescribed course in English literature; and an additional course, which is elective, is provided for those who may wish to continue the study. These courses are for undergraduate students in Groups I–VI,—those who are not making a special study of the subject, but who wish such acquaintance with it as may be regarded a necessary part of a liberal education. The aim of the instruction in these courses is to give the student an outline history of English Literature, to teach him to read intelligently and with insight, and to lead him to read widely in the works of the more important writers.

The Major and Minor Courses are followed by those undergraduates whose studies are directed more especially to modern languages and their literatures (Group VII).

3. In the English Minor a general course in English literature, from the earliest to recent times, is given, the text-book being Tyler's edition of Morley's *Manual.* In addition to the questions suggested by the text-book, the instructor supplements the work by oral instruction, the object being to make this course not a mere memorizing of names, works, and dates, but to give the class some living acquaintance with the more important authors, and to enable them to get some grasp of the literature as a continuous whole. The other part of this course consists of a study of the writers of the Early and Middle English periods, Morris and Skeat's *Specimens* being used as a text-book. The changes which both the language and the literature underwent during this transitional and formative period are dwelt upon, showing by what stages and under what influences Modern English was developed.

The major course in English—a third year's course—is divided between linguistic and literary studies.

4. *Anglo-Saxon.* An elementary course in Anglo-Saxon prose and verse occupies two hours a week for one year. The text-book used is Bright's *Anglo-Saxon Reader.*

5. In the literary part, one hour a week is given to the Early Scottish Poets from Barbour to Lyndsay, whose work con-

tinues the great tradition of English literature during the otherwise somewhat dim period from Chaucer to Surrey. The texts are studied in a reader especially prepared for this class, and the necessary supplemental information, historical and other, is given by the instructor.

6. One hour a week is also given to the study of some important period of literature or group of writers sufficiently characteristic to be regarded as a whole. For the first half-year the Elizabethan writers have usually been taken, including the reading by the class of one play of Shakespeare. For the second half-year some other period or group is selected.

It will be seen that the undergraduate work in the Major and Minor courses comprises: the earliest English or Anglo-Saxon; the transitional literature from the Anglo-Saxon to Chaucer; the great period of Scottish literature between the times of Chaucer and Elizabeth, the great Elizabethans, and some important later period.

German.

This group of studies is under the direction of Professor Wood, assisted by Dr. B. J. Vos, Associate in German, and Dr. T. S. Baker.

Instruction is provided in German of all periods, and in the earlier development of the other members of the Teutonic family of languages.

In the German Seminary, in which the graduate instruction centres, nearly equal attention is devoted to German Literature and German Philology. To enter upon the work of the Seminary in literature, the student should possess a knowledge of German equivalent to that imparted in the undergraduate courses, hereinafter mentioned, supplemented by private readings. For the seminary work in philology, it is desirable, in addition, that preliminary courses in Gothic and Middle High German should be first completed, and these may be taken with advantage by the student immediately upon enter-

ing. All graduate students of German are required to share in both the philological and literary work, and to direct their efforts to the attainment of broad results, which may serve as the foundation of scientific work and of successful teaching; but the Seminary and the allied graduate courses are believed to offer also sufficient opportunity and encouragement for the prosecution of chosen lines of work, whether on the linguistic or literary side, in accordance with individual capacity and bent. In this way, opportunity for independent research is afforded, within the framework of organized effort directed towards the attainment of results which concern the Seminary as a whole, and towards which each member is expected to contribute his share.

The subjects selected for the Seminary during recent years have been as follows:

1891-92. Otfried's Evangelienbuch; Minnesangsfrühling.
1892-93. Walther von der Vogelweide; the Period of "Sturm und Drang."
1893-94. Parzival; Goethe's Faust.
1894-95. Minnesangsfrühling; German Literature in the Eighteenth Century.
1895-96. Goethe and Schiller (1786-1805); Walther von der Vogelweide.
1896-97. Goethe's Faust; Parzival.

The Germanic Society, which meets fortnightly, supplements the work of the German Seminary; before it are presented not only reports on articles in current journals, but also successive results of studies by the members. The chief object of the Society is to foster and guide the aptitude for more sustained individual investigation than the Seminary proper offers scope for. Lists of the papers presented and discussed are given in the yearly reports.

In addition to the work of the Seminary (three meetings a week), other advanced courses are given. For example, in 1896–97, Professor Wood lectured on The Beginnings of Modern German Classicism, and gave courses in Gothic and Old Norse (Sagas). Dr. Vos conducted classes in Old High German, Middle High German (Kudrun), and Old Saxon.

A course on "Das Junge Deutschland" was given by Dr. Baker.

The undergraduate courses in German are conducted chiefly by Dr. B. J. Vos, aided by Dr. T. S. Baker, with further assistance from the Fellow in German and from graduate students. A course in elementary German is given for candidates for matriculation who have entered with Greek. This is followed by the regular work in German during the first college year, a course required of all undergraduates. Nearly equal portions of the German Drama and of German literary prose are read. Private readings and weekly exercises in prose composition supplement the class readings.

Undergraduates in Group VII who elect German, or undergraduates in any of the seven groups who substitute German at this point in their course, pursue the study during a second year. The readings from the classical period are continued in texts of greater difficulty, and instruction is given in the history of German literature and in the writing of German prose.

An Elective Course (rapid reading of contemporary literature) is offered to undergraduates who have completed the work in German of the first college year.

Classes are provided in Historical and Scientific German Prose, for graduates who lack the ability to read German at sight. Classes in Oral Practice and in Conversational German are also provided for both graduates and undergraduates.

Romance Languages.

Advanced instruction in Romance languages is so planned as to cover at least three years and is directed by Dr. A. Marshall Elliott, Professor of Romance Languages, with the assistance of Dr. Menger, Dr. Rambeau, Dr. Marden, Dr. De Haan, and others. The subjects of instruction are divided into three distinct sections; a purely linguistic, a purely lite-

rary, and a composite group which is intended to unite the first two. Every one who intends to take a degree in Romance Languages must work in these three lines, which are so arranged as to supplement one another according to the attainments and bent of the student, and which are concentrated, for given periods of the course, on the same linguistic domain. The first year is chiefly spent in preparation for seminary work, to which the student is generally admitted, as an active member, at the beginning of the second year. During this preliminary period a practical knowledge of the principal Romance languages is acquired (a thorough acquaintance with Latin and Modern French being pre-supposed); a brief survey is given of the history of the science, together with an introduction to the use of scientific methods in language and literature. With this equipment the student is prepared to begin an appreciative scrutiny of special texts with their critical linguistic and literary apparatus. He is taught to handle his materials with discriminating judgment, and, according to his progress, subjects are assigned to him for investigation which tend to develop the patience and accuracy necessary to a careful investigator. In literature, as in language proper, it is particularly to the origins that his attention is directed, though constant reference is made, by way of comparison, to the modern forms. By extensive reading required in connection with the subjects taken up, he is made familiar with the different phases of opinion held by leading European scholars, and is thus enabled to control certain parts of his subject within well-defined limits. After the first year the student is expected to concentrate upon some single line of work within his general field. It will be observed that the student's work in this course is comparative, and that he moves from the general to the particular. In the early part of it, the object is to give a broad basis to work on, by making him so familiar with the principal Romance idioms that he may use them readily, by way of illustration, in his subsequent studies. Dialect study and phonology are made essential features of this plan of studies.

The subjects to which attention has been given in the Seminary in past years are as follows:

1883-84. Anglo-Norman Dialect and the Oaths of Strasburg.
1884-85. Cantilène de Sainte Eulalie and Fragment de Valenciennes.
1885-86. The Franco-Norman Dialect, with the Vie de Saint Alexis.
1886-87. The Oaths of Strasburg and the Cantilène de Sainte Eulalie.
1887-88. Old French Paraphrase of the Canticum Canticorum and the Fragment de Valenciennes.
1888-89. The Oaths of Strasburg and the Cantilène de Sainte Eulalie.
1889-90. *Reimpredigt:* Grant mal fist Adam.
1890-91. L'Epopée royale: Pèlerinage de Charlemagne.
1891-97. Marie de France: Fables.

In addition to the work of the Seminary, lectures are regularly given at stated periods of the course: (1) on French phonetics, physiological and historical, (2) on Old-French syntax, (3) on Romance morphology, (4) on French dialects, (5) on Italian dialects, (6) on Old-French palæography, (7) on the history of French philology, (8) on the linguistic ethnography of France and Italy, (9) on the sources of Romance philology, (10) on Popular Latin, (11) on Italian philology and literature, (12) on Spanish philology and literature, (13) on Old-French literature, (14) on Modern-French literature, (15) on Romance versification.

The special lectures on French literature are arranged to run through the whole period of three years, and form an important part in the training of the student.

A special publication, Modern Language Notes, now in its twelfth volume, is issued monthly by members of the modern language departments, in which are presented the most recent literary and scientific aspects of linguistic research in the modern idioms.

The undergraduate classes in French are conducted by Associate Professor Rambeau and Dr. Marden. Students in Group VII who elect French follow class-work for four hours weekly through two years, during which time they read exten-

sive selections from Modern and Middle-French texts, and are made acquainted with the general laws of French phonology and morphology. All undergraduates must complete the work of the first of these two years. Private reading is required, varying from year to year according to the authors taken up in class.

Courses in Italian and Spanish are also provided for undergraduates.

History, Economics, and Politics.

The work of this department is under the direction of Professor Herbert B. Adams, who devotes special attention to institutional and educational history. He is aided by Associate Professor J. M. Vincent, in European history; Associate Bernard C. Steiner, in American history; Dr. J. C. Ballagh, in classical history; and Mr. G. C. Lee, in English history. In economics the work is guided by Associate Professor Sidney Sherwood, aided by Dr. J. H. Hollander, associate, and by Dr. H. L. Moore, instructor in economics. Dr. E. R. L. Gould gives an annual course upon Social Economics or Municipal Sociology. In politics, systematic instruction throughout the year is given by Dr. W. W. Willoughby, associate. Professor Woodrow Wilson, of Princeton, gives an annual course of lectures upon Comparative Politics.

As at present organized, the work of the department aims to accomplish three main results:

1. The preliminary training of students, both graduate and undergraduate, to such a knowledge of the essential facts and principles of general history and politics as will contribute towards a liberal education and serve to fit men to pursue advanced courses in special branches of these sciences, with a view to taking the doctor's degree or to entering the work of education, law, journalism, charity organization, or the civil service. This training process is pursued in undergraduate class courses, where systematic and positive instruction is given by means of required text-books, lectures, essays,

oral reports, and constant drill. The undergraduate work extends, in its various sections, over a period of three years (see College Courses, Sixth Group, beyond). A course in European History, taken in connection with the outlines of Economics, is also required of every undergraduate student not in the Historical Group. Graduates of other institutions who have not had the equivalent of these preliminary courses in History and Politics and in French and German, are expected to make up their deficiency by extra work in undergraduate classes.

2. Advanced instruction in history, economics, politics, social science, statistics, historical and comparative jurisprudence, historical criticism, methods of research, historiography, for graduates, or special students of mature years, if qualified by ability and previous studies to pursue such courses. Undergraduates pursuing a course for the bachelor's degree are not allowed to take graduate work. Advanced instruction is given chiefly by lectures, accompanied by private readings on the part of the students, and by frequent examinations, both oral and written, upon special subjects.

3. The development of a spirit of original research among the more advanced members. This end is attained chiefly in individual ways by the constant association and co-operation of students and instructors, not only in advanced classes and in various fields of special work, but in organized societies called Seminaries, or Conferences, of History, Economics, and Education, meeting in the department library for the report and discussion of original studies. Political, social, and educational conferences are also held. For several years the scientific researches of graduate students have been more especially in fields of American institutional and economic history. There is now a growing tendency to extend inquiries into the broader domain of comparative politics and economics, social science, and education. The best results of original and organized inquiry by this department are published in the volumes of "Historical Studies." Under the direction of Professor Adams, the history of higher education

in the United States is being written by students and collaborators representing individual States. The results are published by the U. S. Bureau of Education. The results of original economic investigation have hitherto appeared in the "Studies," in the Publications of the American Economic Association, and in leading economic journals.

The following general statement will suffice to characterize the various courses of instruction. Details may be found in the annual announcements.

(*a*) *History.*—Professor Adams gives to graduate students six courses of lectures (two courses each year) upon institutional history. He selects representative phases of ancient and modern civic society. One half of the first year is devoted to the early history of institutions and to Greek politics; the second half, to the history of Prussian politics and the nineteenth century. The first half of the second year is given to Roman constitutional history; the second half to French absolutism and the history of the French Revolution. In the third year particular attention is given to German peoples and their early migration and federations, during the first half; during the second half, to Anglo-American institutions. Each year's work is independent and complete in itself. Professor Adams also gives courses of undergraduate instruction in the history of civilization, Church history, the Italian Renaissance, and the history of international relations.

Dr. James Schouler, author of the History of the United States under the Constitution, gives in successive years three courses of twenty-five lectures each on (1) American political and economic history, (2) American constitutional law, (3) principles of the common law.

Dr. John Martin Vincent lectures to graduates on (1) the social and economic history of Europe, (2) the Reformation and the Protestant Revolution, (3) the science of historical investigation and the general history of historical writing. He also conducts (4) a special conference of graduate students in the study of selected historical problems, and has charge of undergraduates courses (5) in European history, (6) in general Mediaeval and Modern history.

Dr. Bernard C. Steiner conducts an undergraduate course in American political and constitutional history.

Dr. J. C. Ballagh has collegiate classes in Greek and Roman history.

Mr. G. C. Lee conducts a collegiate course in English Constitutional Law and History.

(*b*) *Comparative Politics.*—Professor Woodrow Wilson conducts a three years' graduate course in administration and comparative politics. The first series of lectures discusses the nature, scope, and method of theoretical politics and the general character of administrative law. The second course deals more particularly with central systems of administration, as illustrated in England, France, Prussia, Italy, and the United States. The third course is devoted to systems of local government.

Dr. Westel W. Willoughby gives annual courses of class lectures upon the following subjects: (1) Theory of the State; (2) The Federal State in Theory and Practice; (3) History of Political Philosophy.

(*c*) *Economics and Social Science.*—Systematic instruction is offered both in the general theory and in the most important special fields of economic science. Effort is directed to promote the mastery of sound methods of research. Considerable attention is given to the history of the science itself as one of the best means of studying the development of economic life and institutions.

Dr. Sherwood conducts the following courses: (1) Economic Conference meeting one evening fortnightly for seminary work; (2) Class in Research and Criticism, meeting two hours weekly for co-operative work upon some special subject: the Physiocratic writings and their influence were investigated in 1895–96; in 1896–97, early American economic literature and conditions were studied; (3) six courses of lectures, planned to extend over a period of three years, the subjects being (*a*) credit and money, (*b*) corporations, (*c*) principles of economics, (*d*) transportation, (*e*) French economists, (*f*) banking.

Professor E. R. L. Gould lectures upon social economics and statistics, in various courses: (1) Existing social legislation in the principal countries of Europe, from the comparative point of view and with reference to underlying principles and present problems; (2) Statistics, embracing an analytical statement of the activities of individuals and of industrial and social organs, together with comparative standards of existence in their relation to economic competition; (3) Growth of social institutions, with particular attention to the family and its modern environment, together with the social problems of large cities.

Dr. J. H. Hollander lectures upon (1) science of finance, (2) history of economic theories, (3) financial and industrial history of the United States. In 1895–96, his course was upon the history of economic theories since Adam Smith. In 1896–97, he considered, during the first half of the year, the theory and practice of municipal finance; the second half, he reviewed the history of economic thought before Adam Smith. Dr. Hollander has also conducted a class in the study of the economic development and characteristics of Baltimore.

Dr. H. L. Moore lectures on (1) application of mathematics to economics, (2) trusts, (3) German economics.

Undergraduate instruction, conducted by Doctors Sherwood, Hollander, and Moore, is given as follows: (1) Course in general economics (Minor Politics), four hours weekly throughout the year, required of students in Group VI; (2) course in general economics, two hours weekly throughout the year: taken in connection with a two-hour course in European History, this forms the History-Economics course required of all undergraduates not in Group VI; (3) advanced economics, two hours weekly throughout the year, open as an elective course to students who have taken either (1) or (2).

The Historical Library.

The department of History and Politics occupies a suite of seven well-lighted rooms on the third floor of McCoy Hall. The centre of activity is the Bluntschli Library, or Seminary,

which contains tables and working desks for the graduate students. Here are to be found the books and manuscripts of the late Professor Bluntschli, of Heidelberg, whose library was purchased by German citizens of Baltimore, and generously presented to the University in 1882. With the Bluntschli papers are the MSS. and works of his two friends, Francis Lieber and Edouard Laboulaye. On the tables are the chief periodicals of the world in the domain of History, Politics, and Economics. The walls and cases are decorated with engravings and busts of eminent historians and statesmen. This room is a study, or laboratory, of historical investigation, in which each graduate student has his appointed place. The department has a skilled librarian to give assistance and advice, and a special catalogue is provided for the 18,000 books and 50,000 pamphlets belonging to the Historical Collection. Noticeable among the books is a case containing the thirty or more volumes of Studies written by graduates of the Historical Department, including the series published by the University, and the Contributions to American Educational History, published by the United States Bureau of Education. An adjoining room is devoted to the study of European History and another beyond to Economics. In both, the walls are lined with books appropriate to the work and with views of historical monuments and portraits of great men. The rooms are provided with tables and chairs, instead of formal desks or benches, so that the classes meeting here are friendly conferences amid an environment of books. While all the work of the department is more or less co-operative, the special Historical Seminary of former years has developed from one weekly meeting into four particular conferences, historical, political, economic, and educational.

Across a broad corridor is a room devoted to the study of Jurisprudence and Comparative Politics. Here the books on English, French, German, American and International Law occupy the available wall space, so that lectures on the English Constitutional History, the Federal State, and kindred subjects, are given with the works of reference immediately

at hand. A complete set of the original and the printed documents used in the Alabama case at Geneva is the gift of Mrs. J. A. J. Creswell, whose husband was Counsel for the United States. Adjoining this room is the department of Southern History. The walls and the interior space are taken up with collections of books and materials relating to the history and literature of the Southern States. Special cases contain a valuable collection on Slavery presented by the late General Birney, of Washington. The central cases exhibit in about 400 pamphlet boxes the printed Americana, given by Colonel J. Thomas Scharf, while closed lockers contain the valuable Colonial and Revolutionary manuscripts also presented by Colonel Scharf. In museum cases are shown interesting documents, autographs, and relics relating to the South, while portraits of the distinguished historians and statesmen of that section are arranged in appropriate groups. Among them are the Calverts, Calhoun, William Wirt, John P. Kennedy, Reverdy Johnson, Chief Justice Taney, General Lee, Jefferson Davis, S. Teackle Wallis, and others. In an adjacent side corridor the public documents of the U. S. Government have been arranged along the walls from floor to ceiling. Thanks to our representatives in Congress and to the generous attention of the Superintendent of Documents at Washington, this necessary and material aid to the study of American History is unusually complete.

The end of the main corridor has been attractively furnished with carpet, chairs, and table, affording a convenient place where students may gather between classes for social intercourse. At this point the walls are adorned with large engraved portraits of the fathers of the Constitution and the great American historians. A bust of Alexander Hamilton, presented by Mr. John M. Glenn, is an original by Caracci. A bas-relief of Chief Justice Marshall is a unique original from which the bronzes of the Marshall prize have been made. This prize, given annually for the best published work by a graduate in the field of History, is one of the most highly valued awards in the gift of the University. This cheerful

academic corner forms a convenient connecting link between the Seminary Room and the main Lecture Room. In the latter are chairs and tables for the larger classes, and also cases for the greater part of the archæological museum of the department. The Mayer collection of ancient implements illustrates the development of man through the stone age; the Ellinger collection of relics of the Lake Dwellers shows the transition from the stone to the bronze age; the Cohen collection of Egyptian antiquities forms a large and representative museum of genuine relics illustrating the life and beliefs of ancient Egypt; barbaric implements of war from various stages of savagery decorate the walls. In this room, devoted to lectures on history, are also portraits of the men who have been the leaders of investigation in classical and European history; Niebuhr, Ranke, Curtius, Mommsen, Ihne, De Tocqueville, Arnold, Freeman, Stubbs, Seeley, Froude, and others look down upon the men who are studying their works. Additional museum cases in the corridors contain Indian relics presented by the Maryland Academy of Sciences, implements from Alaska, and other illustrations of primitive life. In the Bluntschli Library is the Helbig collection of Greek and Roman coins, a valuable adjunct to the study of classical history. All these collections are kept before the eyes of the students and are used for the instruction of classes. In the use of the books there are but few restrictions, the shelves being open at all times to men of all departments of the University.

Connecting with the large lecture room is the office and library of the Director of the Historical Department. This is also the editorial room of the Johns Hopkins Studies in Historical and Political Science, and a convenient place where students may consult Professor Adams in regard to their work. Thus, amid an extensive and pleasant environment of books, documents, and illustrative material, with instructors easily accessible, both in and out of lecture hours, department work is proceeding daily in History, Politics and Economics. The history of political and social institutions, ancient and

modern; the economic life of the Middle Ages and modern times; the theory and practice of government; the history and theory of education, economics, finance, statistics, and the practical applications of economic principles are subjects on which both students and professors are engaged in widening the borders of knowledge.

Philosophy.

A course in the History of Philosophy, for graduate students, is given by Professor Griffin, in which Bacon's Novum Organum (Book I), Descartes's Method, Meditations, and Principles of Philosophy, Spinoza's Ethics, Leibnitz's Monadology, Locke's Essay on Human Understanding (Books I, II, IV), Berkeley's Principles of Human Knowledge, Hume's Treatise on Human Nature (Book I), Kant's Critique of Pure Reason and Critique of Practical Reason (in Watson's "Selections") are read and discussed.

The instruction in Philosophy offered at present is, however, mainly undergraduate, consisting of required courses in Logic, Psychology, and Ethics, which occupy five hours per week throughout the year.

(*a*) *Logic.* Attention is given to the general theories of deduction and induction; to the forms of thought—notion, judgment, and reasoning; to the application of the rules of the syllogism, and the detection of the various kinds of fallacies; and to the methods of scientific investigation and proof.

The text-books used are Jevons's Elementary Lessons in Logic and Fowler's Elements of Inductive Logic, and references are given to the larger works of Jevons, and to the works of Mill, Bain, Venn, Keynes, and other recent writers. The work consists of frequent recitations and of short informal lectures, and numerous written exercises are given out from time to time in the opposition and conversion of propositions, in the application of the rules of the syllogism,

in the detection of fallacies, and in the elimination of contradictions from thought.

(*b*) *Psychology.* The instruction in Psychology is intended to give a general view of the results of the new methods of study, the recent investigations in regard to the quality and intensity of sensations, the duration of psychic acts, etc.—in general, the subjects treated in the second part of Ladd's Physiological Psychology—being presented with sufficient detail to render them intelligible and interesting. A series of lectures and demonstrations on the anatomy and physiology of the nervous system—given in 1896-97 by Dr. L. F. Barker—is included in the course.

Especial emphasis is laid upon the facts of conscious experience as known through introspection, the most important end to be secured being, as it is believed, such an understanding of the facts and laws of mental life as shall fit one for wise self-government and effective influence. With this view, such powers and states of mind as attention, memory, association, habit, imagination, the feelings, the will, are discussed in as concrete and practical a way as possible. Baldwin's Elements of Psychology and Ladd's Outlines of Physiological Psychology are used as the basis of instruction, but these are largely supplemented by informal lectures, and by references to various authorities. An essay on an assigned subject is required from each member of the class.

(*c*) *Ethics.* The fundamental problems of Ethics, and the application of moral principles to the guidance of conduct and the formation of character, are considered with special reference to the Christian theory of morals. The great historic systems—hedonism, utilitarianism, intuitionism—and the relation to ethical theory of the doctrine of evolution are discussed with the purpose of enabling the student to reach a just and intelligent view of the grounds and nature of moral obligation. The aim is to make the instruction of a directly practical nature, and to show the bearing of the problems considered upon questions of practical ethics.

Among the topics treated are the following:

Analysis of the fundamental notions—good and bad, right and wrong, conscience, duty, rights, liberty and moral responsibility, merit and demerit, etc.; the interpretation of these notions according to the several schools of ethical theory; the exposition and criticism of utilitarianism, intuitionism, and the ethics of evolution; the distinction between theoretical and practical morality; division of duties according to the various relations of man; duties to self; the general principles of social morality; duties of justice and of benevolence; duties to the family and to the State; the general principles of religious morality; connection between morality and religion; points of difference between Christian and Greek ethics; the moral ideal as modified by Christianity.

The subject is taught by lectures, recitations from a text-book—Fowler's Principles of Morals, Part II, being used at present,—and references to the works of the most important writers. One essay is required from each member of the class.

An outline of the History of Philosophy is given as a voluntary course.

Mathematics.

The requirements of the government service having obliged Professor Newcomb to terminate his active duties in the University on the first of January, 1894, the instruction in higher mathematics is carried on by Professor Craig, Dr. Chessin, Dr. Hulburt, and Dr. Cohen—with such co-operation as may be secured, from time to time, from Professor Newcomb and other persons.

The more advanced courses in mathematics vary from year to year, and are so arranged that a student who remains here two or three years may receive continued and systematic guidance in any of several directions. The courses in pure mathematics are given by Professor Craig, Dr. Chessin, Dr. Hulburt, and Dr. Cohen, with such assistants in the undergraduate work as may be needed from year to year. The less

advanced subjects in mathematics are nearly the same every year; those more advanced generally alternate from year to year. Students properly qualified have open to them most or all of the following courses in any three consecutive years:

Under the general heads of Arithmetic, Algebra, and Geometry: Theory of Numbers, Theory of Substitutions, Theory of Invariants, Theory of Surfaces and Twisted Curves, Higher Plane Curves, and Synthetic Geometry. Courses are also given in Finite Differences and in the Theory of Probabilities.

Under the head of Analysis: Theory of Functions of One and More Complex Variables and Functions of Real Variables, Algebraic Differential Equations, Linear Differential Equations, Partial Differential Equations, Algebraic Integrals of One and Two Variables, Elliptic Functions, Abelian and Theta Functions, Poincaré's Theory of Fuchsian and Kleinian Functions and their application to linear differential equations with algebraic coefficients.

Under the head of Applied Mathematics: Rational Mechanics, Theoretical Dynamics, Celestial Mechanics, Kinematics, Theory of Attractions, and Theory of the Potential, the latter involving a full account of Neumann's, Schwarz's, and Poincaré's methods for Dirichlet's Problem.

Undergraduates are annually instructed in Elementary Analytic Geometry, Theory of Equations, Modern Plane Analytic Geometry, Differential and Integral Calculus, Differential Equations, Solid Analytic Geometry.

Seminary work is carried on by Professor Craig. Short courses of lectures on special subjects other than those mentioned above are given from time to time during the year by Professor Craig and by others who may be invited to do so.

A large number of mathematical journals are regularly received, besides the publications of learned societies abroad and at home. Among the journals received are the following (the asterisk indicating full sets):

Journal für die reine und angewandte Mathematik* (Crelle); Journal de Mathématiques pures et appliquées* (Liouville);

Comptes Rendus; Mathematische Annalen*; Monatshefte für Mathematik und Physik*; L'Intermédiaire des Mathématiciens*; Bulletin des Sciences mathématiques*; Journal de l'École Polytechnique; Annales de l'École Normale; American Journal of Mathematics*; Annali di Matematica*; Giornale di Matematica*; Acta Mathematica*; Archiv für Mathematik und Physik* (Grünert); Zeitschrift für Mathematik und Physik*; Proceedings of the London Mathematical Society*; Bulletin of the American Mathematical Society*; Bulletin de la Société mathématique de France*; Rendiconti del Circolo Matematico di Palermo*; Quarterly Journal of Mathematics*; Messenger of Mathematics; Annals of Mathematics*, etc.

The University has a collection of about two hundred and thirty geometrical models, illustrating the forms of mathematical solids, surfaces, and curves, their singularities and varieties, and the methods of descriptive geometry by which they are represented on a plane.

The American Journal of Mathematics, founded by Professor Sylvester, and edited in recent years by Professor Craig with the coöperation of Professor Newcomb, has completed its eighteenth volume. Volume XIX is in progress. Beginning with Volume X, there has been published in each volume the portrait of an eminent mathematician. Those so far published, and in the order of publication, are as follows: Sylvester, Hermite, Poincaré, Cayley, Klein, Halphen, Lie, Picard, Appell, Fuchs.

Astronomy.

The work of this department is conducted on plans outlined by Professor Simon Newcomb, who acts as general adviser. The instruction is given under the immediate direction of Dr. Charles Lane Poor, who conducts the work in Theoretical and Practical Astronomy. Dr. A. S. Chessin conducts the work in Celestial Mechanics.

The courses at present offered in Astronomy are designed for both graduate and undergraduate students, and they are so arranged as to meet the wants of all classes of students,

from those just beginning the study to those already prepared to carry on advanced work. They include a study of the various branches of the science, illustrated and enforced by practical exercises, and by original work so far as the time at the disposal of the student will permit.

For training students in the use of instruments the University has erected, in connection with the Physical Laboratory, a small working observatory and supplied it with the following instruments:

An equatorial telescope of 9½ inches aperture, with clockwork and filar micrometer.
A meridian circle of 3 inches aperture, with circles 2 feet in diameter reading to seconds.
A small meridian transit instrument.
A sidereal clock, chronographs, etc.
A reflecting circle by Pistor and Martins.
Several other small instruments, including an astronomical theodolite.

All students are required to make and reduce observations and to keep full records of the same; in fact, so far as possible, to do the routine work that would be required in a working observatory.

The principal books and journals relating to Astronomy are arranged in a special library. They include the star catalogues, ephemerides, and tables for use in the observatory, a complete set of the Astronomische Nachrichten, the Astronomical Journal, Monthly Notices of the Royal Astronomical Society, Annales de l'Observatoire de Paris (Mémoires), and the various publications of observatories at home and abroad.

The following is a general view of the courses offered:

Graduate Work.

For those students who wish to take Astronomy as a subordinate subject, a general outline course is given each year. This course is intended to familiarize the student with the most important problems of spherical and practical astronomy, with the principles and general methods of gravita-

tional astronomy, and with the history and literature of the subject. There is also given every year a more advanced course for those students who have already had some preliminary training. Among the subjects treated of in this course are the theories of precession and nutation, the computation and the correction of orbits, and the methods of computing special perturbations.

The advanced courses vary from year to year. Such courses embrace the method of least squares, the theory of measuring instruments, celestial mechanics generally, including the development of functions in trigonometric series, and the various methods of treating and integrating the equations of planetary motion.

Undergraduate Work.

A course in general astronomy is offered as an elective for third-year students. The course embraces an historical sketch of the development of the science and an outline of the present state of our knowledge of the constitution and motions of the celestial bodies. The use of the principal instruments is explained, and some practice is had with the equatorial.

PHYSICS.

The instruction in Physics is under the charge of Professor Rowland, Director of the Laboratory, with the aid of Dr. J. S. Ames, Associate Professor of Physics and Sub-Director of the Laboratory, Dr. Louis Duncan, Associate Professor of Electricity, Mr. H. S. Hering, Mr. H. G. Geer, Dr. W. J. A. Bliss, and several assistants.

The laboratory is a substantial brick building 117 feet long by 71 feet wide, with five stories besides a basement and a sub-basement, and is so situated as to receive light from all four sides. Power and heat are furnished from separate buildings. The sub-basement is divided into constant-temperature vaults, in which are kept the dividing-engines used

in ruling gratings for optical purposes, and the comparators designed for accurately measuring lengths. In the front part of the basement are the instrument and machine shops and the dynamo room. In the rear are four rooms designed for special investigations in electricity and magnetism and the battery room, which contains fifty storage cells with a suitable switch-board and connections with all the working-rooms in the building. The main lecture-room with seats for 100 persons is on the first floor and is two stories in height. It is well lighted by windows on two sides, which can, however, be darkened if lantern demonstrations are given; and the lecture-table is provided with gas, water, electricity and power connections. On the same floor as the lecture-room are two rooms for heat experiments and four for work in electricity and magnetism. On the second floor are the director's study and library; the physical, mathematical, and astronomical seminary and journal meeting-room; four lecture-rooms; and two rooms for the storage of lecture apparatus. On the third floor are the elementary laboratories and the studies of various instructors. The fourth floor is specially arranged for investigations in light. There are spectrometer and photographing rooms, a balcony for heliostats, and other ample facilities for work in spectroscopy. On the fifth floor are rooms designed for special researches in light, and two large lofts. On the roof is a platform for open-air experiments; and the corner tower is surmounted by the dome of the astronomical observatory. A transit-house in the yard furnishes exact time.

A temporary power-house has been erected to facilitate the work in electrical engineering. It is a one-story building, 25 by 65 feet, located opposite the physical laboratory, on Garden street, and contains a 900-light Westinghouse alternating current dynamo with its complete equipment, a 500-light Fort Wayne continuous current dynamo, a two-phase plant for the transmission of power, other smaller dynamos and motors, a 50 horse-power Ball & Wood engine, and a 60 horse-power vertical boiler to drive these machines. The

electric current from any of the machines can be conveyed to the physical laboratory to furnish light and power, or to be used for experimental purposes. A large number of other dynamos and motors are in the basement of the laboratory.

The physical apparatus includes an equipment for lectures and demonstrations and a valuable collection of instruments for elementary work and research. Many of these have been made from special designs, others are standard instruments which have been purchased from European and American makers; all of them have been most carefully selected. Special facilities, in some cases almost unique, are afforded those wishing to carry on investigations in electricity and in light.

The physical and mathematical libraries of the University are now placed in McCoy Hall, where they are easily accessible at any time. The physical section contains complete sets of almost all the physical journals published in this country and abroad, and all the standard books of the present and the past. About sixty periodicals, English, French, German, and Italian, are received. Certain magazines and books of reference are, however, retained in the Seminary Room of the laboratory, where the advanced students can consult them at any moment. This small collection is specially selected each year with reference to the courses of advanced instruction offered that year. Among the magazines kept on file in the laboratory are the following:

Philosophical Magazine, Physical Review, The Astrophysical Journal, Wiedemann's Annalen and Beiblätter, Zeitschrift für Physikalische Chemie, Journal de Physique, Comptes Rendus, Proceedings and Transactions of the Royal Society of London, and the Proceedings of the London Physical Society.

Instruction and facilities for work in the laboratory are offered all classes of students, elementary and advanced. The following is a general view of the courses:

First Year (Minor) Course.—This is intended for students who are beginning Physics or who have not a sufficient knowledge of the principles of the subject to warrant their taking

up more advanced work. To enter this course a student must be able to use logarithms and must have studied plane trigonometry, at least as far as through the solution of right-angled triangles. The lectures are accompanied by demonstrations; and mechanics, sound, heat, electricity and magnetism, and light, are taken up in succession. Recitations on the subjects treated in the lectures are held regularly, and the course continues, four hours weekly, through the year. Along with the lectures the student does regular work in the laboratory, three hours a week, performing simple quantitative experiments, which illustrate the facts and principles considered in the class-room. Written records of lectures and reports of laboratory exercises are required.

Second Year (Major) Course.—This is designed to meet the needs of students who have already taken either the first year's course, or its equivalent, and who wish to pursue further their physical studies. A working knowledge of analytic geometry and calculus is required for admission to this course. The lectures take up the mathematical side of physics largely, and are on the following subjects:

Mechanics, extending to some of the simpler problems in the dynamics of rigid and elastic bodies.
Elementary Thermodynamics.
Mathematical Theory of Electricity and Magnetism.
Geometrical and Physical Optics, with special reference to diffraction phenomena.

Recitations are held regularly, and the course continues, four hours weekly, through the year. The laboratory work of this year occupies at least five hours a week, and includes problems that present greater difficulties, experimental or theoretical, than those of the first year. The student is allowed the choice of work in mechanics and electricity, or in heat and light. Written records and reports are also required in this course.

Advanced Work.—For the instruction of those students who have the necessary preparation, certain lectures are given in

Mathematical Physics. There is one course, continuing through two years, which includes thermodynamics, heat conduction, physical optics, electricity and magnetism. As a preparation for this course, students are advised to take a preliminary course for one year, which treats briefly one or two subjects such as hydrodynamics, theory of elasticity, sound, mechanics, or theory of attractions. These lectures develop fully the mathematical theory of the subjects; and to follow them the student should have a satisfactory knowledge of differential equations and analytic geometry of three dimensions. Authors like Lord Kelvin, Lord Rayleigh, Maxwell, von Helmholtz, Poincaré are continually referred to, and the ability to read French and German is absolutely necessary.

The advanced students meet with the instructors once a week for the discussion of the current physical journals. Carefully prepared reports on various articles are here presented.

The Physical Seminary, to which only the most advanced students are admitted, meets one morning each week. The work of the seminary consists of two distinct exercises. One is the reading of some physical treatise and a consideration of the problems suggested by it; the other is the presentation of critical papers upon various assigned topics which are of special or historical importance.

The peculiar facilities for original research which are here afforded have caused special attention to be paid to advanced work, for the training both of investigators and of teachers; and all advanced students are expected to give as much of their time as possible to laboratory work. It is to this side of the subject that the Director gives his most immediate and careful attention; and not only are students able to watch important investigations as they are carried on, but, after a certain preliminary training, they themselves may aid in such work, or, under the guidance of the instructors, may undertake investigations which are designed to be of permanent value. As a preparation for this advanced work several

months are spent by the students performing experiments which familiarize them with the more important instruments used in research, with the precautions necessary to obtain the utmost accuracy in using instruments of precision, and with general experimental methods.

An effort is made to render the laboratory as useful as possible to advanced students and investigators. Those who are prepared for such work will have the facilities which it affords placed most freely at their disposal, and will receive all the assistance that the instructors can give.

Applied Electricity.

The work in Applied Electricity is intended to give the students such a knowledge of the subject as will fit them to understand and appreciate the latest discoveries in electrical science, and to apply these to the practical electrical problems of the day.

The course includes lectures, extending through two years, on theoretical and applied electricity, steam and hydraulic engineering, central station equipment, machine design, mechanics of engineering, and practice in mechanical drawing. An important feature is laboratory work, to which much attention is paid, and original investigation is especially encouraged. The course is primarily intended for college graduates.

Students who have received the degree of Bachelor of Arts on completing the mathematical-physical group in this University are admitted without examination. Graduates of other colleges are not examined for admission, but they must satisfy the instructors that they are prepared to take the course.

Candidates for admission must have completed the major and minor courses of this University (or their equivalents elsewhere) in physics and mathematics, the minor course in chemistry, and the course in freehand and instrumental drawing; and must be able to read either French or German. Those who have not had all this preparatory training must

follow the courses in which they are deficient; only one of these may be taken simultaneously with the regular work of the course.

Persons, not college graduates, who wish to complete their preparation for the work in Applied Electricity, may be admitted to the requisite undergraduate courses, on passing an entrance examination (see page 159) covering the matriculation requirements in the following subjects: mathematics, French or German ("first division"), English, United States history, and the elements of one of the following branches of science—chemistry, botany, or physical geography. They will then follow for two years the preparatory courses in mathematics, physics, chemistry, and drawing, above referred to.

A certificate of proficiency is given to those students who complete the prescribed course in a satisfactory manner, and who possess a knowledge of *both* French and German.

The following is an outline of the course:

Electricity.—The instruction includes lectures on theoretical and applied electricity, with constant laboratory work. The lectures aim to give a clear working knowledge of the science, while in the laboratory the student receives what help and instruction he may need; yet, at the same time, he is taught to depend upon and think for himself, and is given every encouragement to undertake original work. In the first year the course includes lectures and examples on the physical and mathematical theory of electricity; in the second year, theory and design of dynamos and motors, transmission of energy, electric traction, telephones, telegraphs, alternating current apparatus, etc.

Electrical Measurements.—Accompanying the laboratory work during the first year, a course of lectures is given upon general methods of performing experiments and conducting tests, in which the fundamental measurements in electricity and magnetism and tests of generators and motors are considered.

Electrical Seminary.—Weekly meetings are held, at which students present carefully prepared papers upon special topics in connection with their studies or their laboratory work.

Steam and Hydraulic Engineering.—Steam boilers, steam engines, and turbines are considered, with especial reference to the requirements of central station work and in accordance with the best modern practice. Steam engine and boiler trials and tests of large stations, as well as the design of central stations for light or power, form important features of the course.

Machine Design.—The properties and strength of materials are considered in their relation to the forms and proportions of the structural details of prime movers and transmission machinery.

Mechanics of Engineering.—The statics of structures is treated by analytical and graphical methods, combined with the statics, dynamics, and kinematics of machinery, the mechanism of prime movers, and power transmission.

Mechanical Drawing.—Preparatory work in geometric constructions and descriptive geometry is followed by a course in technical drawing especially planned to meet the requirements of electrical engineering work. It consists during the first year of a preparatory course in precise drawing and in making finished drawings from machine sketches. This is followed by a course in practical machine design and the preparation of working drawings, tracings, and blue prints. The object in view is to familiarize the student with the conventional technicalities and enable him to obtain accuracy and facility in drawing and lettering.

During the second year the work embraces assembly drawings of machinery, boilers, dynamos, central stations, etc., prepared largely from the original designs of the students. This work is described in detail under the head of "Drawing" (see page 140).

Laboratory Work.—The students are expected to spend all their available time in laboratory work, and the minimum time allowed is nine hours per week.

During the first year, exercises are given in fundamental experiments: the measurement of electromotive force, current, resistance, self and mutual induction, capacity, permeability, comparison of resistance, testing cables, batteries, dynamos, motors, incandescent and arc lamps, etc. The work is largely individual, and the character and grade of the work given to the student is determined by his qualifications.

During the second year more advanced work is done; the students are given original problems to work out in the laboratory, and research work is engaged in. Tests and critical examinations of engines, boilers, and other prime movers and their accessories; experiments and investigations in direct and alternating current lighting and power plants are important features of this year's work.

Geology.

The instruction in Geology is under the direction of Professor Clark, assisted by Dr. Reid, Associate Professor of Geological Physics, Dr. Mathews, Associate in Mineralogy and Petrography, and Dr. Bagg, Assistant in Geology. Important courses of lectures are given by Mr. G. K. Gilbert, of the U. S. Geological Survey, Lecturer upon Physiographic Geology, and by Mr. Bailey Willis, also of the U. S. Geological Survey, Lecturer upon Stratigraphic and Structural Geology.

The George Huntington Williams Memorial Lectureship upon the Principles of Geology was inaugurated in April, 1897, by Sir Archibald Geikie, Director-General of the Geological Survey of Great Britain and Ireland.

The courses in geology, which are offered to both graduate and undergraduate students, consist of lectures, laboratory and field work, and conferences upon topics of current litera-

ture. Great importance is attached to laboratory training as a part of the geological course, and facilities are given for daily work from 9 a. m. to 5 p. m.

Commodious rooms have been fitted up recently in Hopkins Hall for the uses of the geological department, and contain the books, apparatus, and collections pertaining to geology.

Lecture Courses.—I. General Geology.—This course is planned to serve for the present as one of the regular undergraduate subjects, and at the same time to be introductory to all work in geology for graduate students, irrespective of the particular department in which they may choose their principal subject. The lectures embrace a general survey of the whole field of geology and are illustrated by rocks and fossils, by maps and sections, and by lantern views. Excursions are made on Saturdays, during the autumn and spring months, into the surrounding country, and two longer excursions, extending from Thursday to Saturday, are generally made in the spring. During the winter months an afternoon weekly is devoted, in the laboratory, to the exposition of specimens of rocks, fossils, and minerals. This course and the minor course in Biology cannot be taken in the same year by undergraduates.

II. Paleontology.—Attention is devoted to both the biological and geological relations of the important types of the animal and plant kingdoms. The phylogenetic history of the leading groups is traced out in detail, whenever suitable evidence exists. Laboratory work is arranged to accompany the course, care being taken to select typical material.

III. Historical Geology.—In this course the classification and distribution of the post-Archæan sedimentary rocks is considered. The use of fossils in the determination of horizons is fully explained, and a detailed study made of the maps and literature of the different countries of the globe.

IV. Geological Physics.—In this course the geological phenomena which depend directly upon physical principles are

treated theoretically and experimentally. The problems relating to the temperature, the rigidity, the age, and the magnetic condition of the earth, as well as those relating to volcanoes, earthquakes, geysers, glaciers, etc., are discussed.

V. Mineralogy.—This course consists of lectures upon crystallography, upon optical and general physical mineralogy, and upon the description of mineral species. Facilities are offered to those who wish to undertake crystal-measuring, as well as the practical determination of minerals.

VI. Petrography.—This course consists of the discussion of petrographical methods, of rock structures, and of physical properties of rock masses, followed by the special petrography of the igneous rocks, including the study of the various classifications, the macroscopical and microscopical features of rocks, together with a discussion of their origin, distribution, and literature.

VII. Physiographic Geology.—This course of lectures is given by Mr. Gilbert and is fully illustrated by maps, models, and lantern views. The subject of the course is the origin of the forms of the earth's surface, and its treatment includes the systematic presentation of a large body of the principles of dynamic geology, especially those which apply to the sculpture of the land by the various processes of erosion.

VIII. Stratigraphic and Structural Geology.—This course is given by Mr. Willis and is a sequel to that of Mr. Gilbert. It consists of a description of the processes which result in the formation and upheaval of sedimentary rocks. Erosion is discussed with special reference to conditions governing the character of detrital materials. Sedimentation is considered as a complex process of sorting, distribution, and deposition of the waste of land areas, and deformation is treated as the process which initiates erosion, and also, as applied to folding, as the indirect result of excessive deposition. The mechanics of rock folding and thrusting is illustrated both by actual sections of the Appalachians and by experimental results. The whole course leads to a discussion of the principles which should govern interpretation of the sedimentary record.

IX. Principles of Geology. (The George Huntington Williams Memorial Lectureship.) This course was inaugurated by Sir Archibald Geikie in April, 1897.

Laboratory Work.—Laboratory courses are arranged to accompany the lectures, while advanced or special students are given the opportunity to carry on fuller investigations upon either described or new materials.

The introductory laboratory work consists of an examination of materials designed to illustrate Course I, and includes typical fossils and minerals, together with maps, models, and sections of fully described areas.

Specially selected materials are also employed to illustrate the more advanced courses. Extensive collections for both the organic and inorganic work are owned by the University and include both determined and undetermined specimens.

For those who plan to carry on original investigations, large series of undescribed materials will be found accessible, while the immediate region affords exceptional opportunities for further collecting. Several such special pieces of work relating to the local area have been already published, while others are at the present time in process of preparation in the laboratory.

Field Work.—The area of the State of Maryland includes, notwithstanding its comparatively small size, a remarkably perfect sequence of all the geological formations. The most ancient rocks which make up the earth's crust, as well as those still in the process of deposition, are here found, while between these wide limits there is hardly an important geological epoch which is not represented. As a result, most excellent facilities are afforded for a study of the various geological horizons. During the autumn and spring, excursions are made upon Saturdays into the surrounding country, the crystalline areas and the various Cretaceous and Tertiary formations being readily accessible. More extensive excursions are made from time to time into the early Mesozoic and Palæozoic areas of the western portion of the State and into

the highly fossiliferous Tertiary region of the lower Chesapeake Bay.

After the student has become familiar with the various regions under the guidance of the instructors, he is encouraged to take up the study of some specified area, where, according to his inclination, he may carry on investigations upon the older crystalline rocks or the later fossiliferous strata. Several theses of this nature have been already presented for the degree of Doctor of Philosophy.

Conferences and Student Lectures.—In order that the advanced students may be kept in touch with the most recent investigations in the science, conferences are held, at which the leading journals in geology are reviewed by the students under the direction of the instructors. The conferences take place bi-weekly. The leading articles are given with some fulness, outline maps and sections being prepared in a manner suitable to illustrate the abstracts of the papers presented. At these conferences considerable attention is given to the foreign journals, particularly those in German and French.

In order that the advanced students may have the experience necessary for the successful preparation and delivery of class-room lectures, a course upon some phase of geology is arranged for, a special topic being assigned to each student. The lectures of this course take place bi-weekly, alternating with the conferences.

Geological Laboratory.—The Geological Laboratory is situated in Hopkins Hall, and comprises about thirty rooms, large and small, upon the second and third floors, where the student may carry on his work from 9 a. m. to 5 p. m.

The main room upon the third floor, now called the Williams Room, contains the collections and library of the late Professor George Huntington Williams. A room upon the same floor contains the books and collections of the late Professor H. Carvill Lewis, and is known as the Lewis Room.

In accordance with the custom of the University, the books relating to the work of a particular department are given into its charge, the books for general reference being retained in the University library. The library of this department contains a good representation of the leading journals and works of reference upon geological subjects. It is greatly enriched by the Williams and Lewis libraries. Extensive series of topographical and geological maps likewise form a portion of the library, and these are constantly increasing in number.

Collections and Apparatus.—The collections of the department consist primarily of a large amount of important material brought together from Maryland and adjacent States by the late Professor Williams and those associated with him. It represents all the horizons of this State, being especially rich in crystalline rocks and in Cretaceous and Tertiary fossils. Some of this material has been already described, while much awaits further study.

In the Williams Room are placed the collections of Professor Williams, consisting of extensive suites of specimens and thin sections of minerals and rocks selected from the best known and most thoroughly studied localities in both Europe and America.

Other important collections are the following:

The Lewis Collection of rocks and thin sections, numbering over 1000 specimens, deposited with the University by Mrs. Lewis. These specimens were collected by the late Professor H. Carvill Lewis and represent carefully selected material, especially from Pennsylvania, Germany, Switzerland, and South Africa.

The Krantz Collection of fossils contains several thousand specimens from the best known localities in Europe, being representative of all the different horizons.

The Hill Collection contains a large number of specimens of rocks and characteristic fossils, from the Cretaceous formations of Texas, collected by Professor R. T. Hill, of the U. S.

Geological Survey. Most of Professor Hill's types are in the collection.

The Stürtz Collection, a suite of over 400 hand specimens and accompanying thin sections. These represent the rocks cited by Professor Rosenbusch in his *Mikroskopische Physiographie* and are from the type localities.

The Lehmann Collection, a suite of specimens and thin sections gathered by Professor J. Lehmann and sent by him to the University to illustrate his well-known work on the Crystalline Schists.

The Allen Collection of Minerals, which is especially rich in early discoveries from American localities, includes many of the type specimens illustrating the works of the late Professor O. D. Allen.

There are also the private collections made by Professor Clark in Europe, and numerous smaller collections obtained by gift or exchange, representing the geology of many portions of the globe.

The apparatus includes a series of beautiful models of the continents, placed in the custody of the University by E. H. Butler & Co., Publishers, of Philadelphia; a large model of the State of Maryland, on the scale of 1½ miles to the inch, in the custody of the State Geological Survey; a model of Baltimore and vicinity, on the scale of 4 inches to a mile, without vertical exaggeration; the Shaler and Davis models, together with a large number of photographs and lantern slides. There are also several goniometers, a dissolving stereopticon, over a dozen microscopes of late design, an electrical machine for preparing rock-sections, a complete suite of wooden and glass crystal models, together with other important pieces of apparatus for special work.

State Organizations.—The headquarters of the Maryland Geological Survey and Maryland State Weather Service are at the University, Professor Clark being both State Geologist and Director of the Weather Service. Special facilities are afforded advanced students, on this account, to carry on work in connection with these bureaus during vacation time.

Geological Publications relating to the Baltimore Region.—The following publications relating to the local environment can be obtained from the Johns Hopkins Press:

Topographical Map of Baltimore and vicinity, price $1.00.

Geological Map of Baltimore and vicinity, price $1.00.

Geology and Physical Features of Maryland, price $1.00.

Climatology and Physical Features of Maryland (including Geology), being the First Biennial Report of the Maryland State Weather Service, free.

Many smaller contributions upon the geology of the Baltimore area have appeared in the Johns Hopkins University Circulars.

Other important papers have been published by the U. S. Geological Survey and in the various scientific journals.

Chemistry.

The instruction in Chemistry is under the charge of Professor Remsen, Director of the Laboratory, with the coöperation of Professor Morse, Sub-Director, Professor Renouf, First Assistant, Dr. Randall, Second Assistant, Dr. Gilpin, Dr. Jones, and other aids.

The Chemical Laboratory is well equipped. The original building, erected in 1876-77, was much enlarged in 1883, and again in 1890 extensive changes were made in it, so that now it can accommodate about two hundred students. A large lecture-room has also been provided in an adjoining building. In McCoy Hall there is a room for fine weighing, to be used in work on atomic weights. There is an excellent library in the laboratory building, open during the working hours. It contains full sets of all the important chemical journals, as well as the principal text-books and other publications relating to chemistry.

It is believed that the instruction is adapted to all grades of students, from the beginner to the candidate for the degree of Doctor of Philosophy. The higher or graduate work is

based upon that given in the two years' undergraduate course, and those graduates of other colleges who have not followed courses equivalent to this begin with that part of the undergraduate work which appears best suited to their needs. The following outline of the work will give some idea of its character:

Undergraduate work: First year.—From five to six hours each week through the year are given to laboratory practice. Three lectures are given each week by Professor Remsen or Professor Renouf, and one review on the subjects treated in the lectures and on the laboratory work is conducted by Professor Renouf, Dr. Randall, and Dr. Gilpin. The ground covered by this course is approximately that laid down in "An Introduction to the Study of Chemistry" by Ira Remsen (Holt, New York), which is the text-book used.

Undergraduate work: Second year.—In this year the same amount of time is given to the laboratory as in the first year. The object in view is to give a more complete knowledge of the phenomena of chemistry than is given in the first year. The making of preparations of both inorganic and organic compounds plays an important part in the work. Further, the study of analytic reactions and of analysis is taken up as far as the time permits. Besides the laboratory practice, the course includes class-room work as follows: From October 1 until the Christmas recess four exercises a week in general inorganic chemistry, based largely upon the laboratory work, and conducted by Professor Renouf. As a book of reference to be used in connection with the laboratory work of this part of the course, and also for general study, Remsen's "Inorganic Chemistry: Advanced Course" (Holt, New York) is recommended. From January 1 until the end of the year the study of the chemistry of the compounds of carbon is taken up, the class-room work, which is based upon Remsen's "Introduction to the Study of the Compounds of Carbon" (Heath, Boston), occupying four hours a week, under the guidance of Professor Morse.

Advanced work.—The greater part of the work in the advanced courses is carried on in the laboratory. The subject of qualitative analysis is taken up thoroughly after a careful study of reactions as laid down in the "Introduction to Chemical Analysis" by Volhard and Zimmerman, while at the same time the study of general chemistry is continued. A prolonged course in quantitative analysis follows. The analytical work, which is under the supervision of Professor Morse, requires about a year. After this, an opportunity is given for the preparation of a variety of compounds involving methods of general importance, or illustrating important classes. A course in the methods of physical chemistry, such as the determination of molecular weights by observations on the boiling-points and freezing-points of solutions, measurements of electrical conductivity, etc., is conducted by Dr. Jones. The course in the preparation of organic compounds is that laid down in Remsen's "Introduction to the Study of the Compounds of Carbon," supplemented by selections from Levy's "Anleitung zur Darstellung organischer Präparate," Fischer's book of the same title, and Gattermann's "Die Praxis des organischen Chemikers." This work is under the personal supervision of Professor Remsen. During the last year of his course the student undertakes an investigation, generally under the guidance of Professor Remsen, and, in case he is a candidate for the degree of Doctor of Philosophy, his thesis is based upon the results obtained in the course of the investigation. The more important parts of the thesis are afterwards published in the "American Chemical Journal."

Special lectures are offered to advanced students, the topics varying from year to year. From the beginning of the current year until the middle of January Professor Remsen gave two lectures a week to graduate students on Theoretical Chemistry, and from that time until the end of the year he gave four lectures a week on the Compounds of Carbon. Professor Morse gave one lecture a week throughout the year on analytical methods. From October to Christmas Dr. Randall

gave a course of about twenty lectures on Physical Chemistry. Throughout the year Dr. H. C. Jones gave a special course of lectures on Physical Chemistry twice a week. There was also a short course of lectures in the field of historical chemistry, in which the advanced students took part, each one working up an assigned topic, and presenting the results in the form of a lecture. Meetings were held weekly during the year to hear reports upon the more important articles in the journals of chemistry. Reports were furnished in turn by most of those who attended these meetings. Next year, 1897–98, Professor Remsen will lecture twice weekly during the first half-year on selected topics in advanced chemistry, for graduate students, and four or five times weekly during the second half-year on the chemistry of the compounds of carbon, for graduate students; Professor Morse will lecture once weekly on special topics in analytical chemistry. Lectures on physical chemistry will also be given as last year. The historical course and the journal meetings will be continued.

While, in the courses outlined above, the books mentioned are used as the guides, the instruction is in no case confined to what is presented in the book. Students are constantly referred to the journals and other publications containing articles bearing upon their work. Further, *the chief instruction in every course is that given in the laboratory.*

As regards the time required by a graduate student to complete the work for the degree of Doctor of Philosophy, it can only be said that one who has the necessary qualifications can generally do it in three years, after following such a course as that given to the undergraduates of this university who take the two years' course in chemistry. Those who have not had this preparation will generally require a longer time. There are no stereotyped courses leading to the higher degree, and it is impossible to say exactly what must be accomplished to attain it. What is desired is a certain maturity of mind with reference to the science of chemistry, and an ability to deal with chemical problems intelligently. This

condition of mind is reached, if reached at all, by long-continued laboratory training accompanied by careful study of chemical journals and treatises. It may be said finally that the arrangements of the laboratory are made mainly with reference to those who wish to take up the study of chemistry in a broad way, and that those who want short courses in special branches of chemistry are not advised to come here. It is believed that whatever object the student may have in view, whether he intends to teach or to follow some branch of applied chemistry, the best preparation he can have is a thorough training in the pure science.

The American Chemical Journal, edited by Professor Remsen, is now in its nineteenth volume.

Biology.

Instruction for both graduate and undergraduate students is given in the Biological Laboratory, a four-story building of eighty by fifty-four feet, opened in 1884, with large rooms for general and undergraduate work, separate work-rooms for students engaged in research, a small museum, and an herbarium. It is well equipped with apparatus and other facilities for training in the methods of experimental physiology, zoölogy, and botany, and for special investigations in these subjects. It contains a library with a very complete set of standard works, special treatises, reprints, dissertations, and the important physiological, zoölogical, and botanical journals.

Advanced Work.

Opportunities are given for advanced work in zoölogy, animal physiology, and botany. A detailed account of the courses for each year may be found in the University Circulars and announcements.

The work in Zoölogy is directed by Dr. W. K. Brooks, Professor of Zoölogy, assisted by Dr. E. A. Andrews, Associate Professor of Biology, and by laboratory assistants.

The studies which are carried on in the laboratory are supplemented by work at the Marine Station, which is established, from time to time, at suitable points upon the seashore; by special lectures; by weekly meetings of the zoölogical journal club for the discussion of current literature; and by the work of the zoölogical seminary, which meets three times a week.

The Baltimore Naturalists' Field Club holds monthly meetings in the Biological Laboratory, and weekly excursions, to which all members of the University are invited, during the favorable season of the year.

One of the ordinary fellowships in the University is usually awarded, each year, to a graduate student in zoölogy, and, in the selection of the Bruce Fellow, preference is given to those who have held ordinary fellowships in zoölogy.

One of the graduate students in zoölogy may be appointed each year to occupy, during the summer months, the university table at the laboratory of the United States Fish Commission at Wood's Holl.

Whenever researches or parts of researches which have been carried on in the laboratory are completed and ready for publication, the University Circulars provide for the prompt publication of abstracts of the results.

Students looking forward to the degree of Doctor of Philosophy may offer zoölogy as a principal or as a subsidiary subject, but if they have not already pursued studies equivalent to the undergraduate courses in this laboratory, they will be required to take these courses. Those who make zoölogy their principal subject, may select, as subordinates, any two of these subjects, viz., anatomy, animal physiology, botany, chemistry, geology, physics, or any other approved combination.

The work in Physiology is directed by Professor W. H. Howell, assisted by Dr. G. P. Dreyer. A course of lectures covering the general and special physiology of the animal body is given each year and is illustrated by a large number of class demonstrations. In connection with this series of lectures, a laboratory course in experimental physiology is

offered extending over a period of twelve weeks and giving the student an introduction to the methods of laboratory technique. This general course of lectures is supplemented by advanced lectures given from time to time upon selected topics; by the work of the physiological seminary, which meets at stated intervals for the special study of certain parts of physiology; and by a weekly journal club intended for the presentation and discussion of the material contained in the current periodicals.

In addition to the physiological literature contained in the library belonging to the laboratory, publications upon physiology and the related scientific branches of medicine may be obtained conveniently from the libraries of the Medical School, the Medical and Chirurgical Faculty of Maryland, and the Surgeon General's office in Washington.

Students looking forward to the degree of Doctor of Philosophy may offer Animal Physiology as a principal or as a subordinate subject. Those who take physiology as a principal subject must present evidence of previous training in physics equivalent to the minor undergraduate course in this University, in chemistry equivalent to the minor and major undergraduate courses, and in biology equivalent to the minor and major undergraduate courses.

The laboratory is open also to special students, graduates in medicine and others, who may wish to undertake laboratory investigations, or desire to become acquainted with the use of physiological apparatus and the methods of demonstration and research.

The work in Botany is conducted, under the direction of Professor Brooks, by Dr. J. E. Humphrey, who lectures during the entire year on the comparative morphology of the vegetable kingdom. A laboratory course parallel to the lectures is also offered as a preparation for more special and research work. The botanical seminary meets at stated intervals for the study and discussion of selected topics. Students of botany have access to the extensive herbarium of Capt. John Donnell Smith, to the Schimper herbarium, to the Fitzgerald collection of Mosses, to Dr. Humphrey's col-

lections of Cryptogams, and to the local herbarium of the Field Club.

The various scientific libraries of the city, including the valuable library of Captain Smith, contain most of the important botanical literature.

Botany may be taken as a principal or as a subordinate subject for the degree of Doctor of Philosophy.

In April and May the study of the external morphology and classification of the flowering plants is taken up under the instruction of Dr. B. W. Barton.

Undergraduate Instruction.

The principle underlying the college training in biology is the postponement of specialization until a broad view of some of the general truths of biology has been obtained.

The aim is to train the powers of observation and reasoning, while the facts gained are such as may with advantage belong to every well informed mind and may also form the basis for subsequent specialization.

The work of the first year (*Minor Biology*) is designed as part of the general education of every college student and is open to all candidates for the A. B. degree, as well as to special students. It is regarded as essential to all students intending to take up the study of medicine or to follow any line of applied biology, and it (or an equivalent) is required for entrance to the Medical School. This course may be taken without previous courses in physics and chemistry, but preparatory training of this character is strongly recommended. It is chiefly a laboratory course of two afternoons a week throughout the year, supplemented by four hours a week of lectures, recitations, and exercises designed to emphasize the more essential truths of biology. In the laboratory, each student studies with the microscope or dissects selected plants and animals from the simpler, such as amoeba and yeast, to the complex, such as the fern, the frog, the flowering plant, and the rat; he studies directly the human skeleton and compares it with the skeletons of animals; and in the Spring he studies the life history of the frog and the formation of the chick in the hen's egg.

The work of the second year (*Major Biology*) is intended for those who have some special interest in biology. It is divided into three parts, designed to give the student an acquaintance with the methods and principles of the scientific study of zoölogy, physiology, and embryology. The time required is the same as in the minor course.

There is also a short course in zoölogy offered as a two hour elective for students in other departments, and all students in the University are invited to join the excursions of the Naturalists' Field Club.

Pathology.

The Pathological Laboratory is a building of four stories on the grounds of the Johns Hopkins Hospital, with which it is connected. The autopsy theatre is in this building, which includes also rooms for pathological histology, bacteriology, experimental pathology, and private work. The museum contains a useful collection of morbid specimens.

The library of the Johns Hopkins Hospital, close to the laboratory, contains a large number of books of reference and receives regularly the chief medical and pathological journals.

Facilities are afforded for elementary and advanced study in general and special pathological anatomy, general pathology, and bacteriology. The instruction in pathology is given by Professor Welch and Associate Professor Flexner.

The instruction in pathology for matriculates in the Medical School continues throughout the second year of the regular medical course. It includes general pathology, gross morbid anatomy, pathological histology, and the technique of post-mortem examinations. The laboratory work occupies three half-days a week.

A course in pathological histology for physicians is given during the months of May and June. This course presupposes on the part of the student a knowledge of normal histology. In connection with the course, demonstrations of

fresh pathological specimens are made and opportunity is afforded to become familiar with the method of making post-mortem examinations. After the study of inflammation, the pathological histology of the different tissues and organs of the body is taken up in regular order. Microscopical sections are given to be stained, mounted, and carefully studied and drawn. The student is encouraged to do as much independent work as his time will permit.

The instruction in bacteriology is given by Professor Welch and an assistant in bacteriology. In addition to the course for matriculates in the medical department, courses in this subject are given to physicians in May and June. Students are taught the preparation of culture-media, the principles of disinfection and sterilization, methods of cultivating, staining, and studying bacteria, particularly those of a pathogenic nature, and the biological examination of the air, water, and soil. This department is fully supplied with the requisite apparatus and cultures for bacteriological work.

In addition to the regular courses for medical students and physicians, opportunity is afforded for advanced work and special research in pathology and bacteriology. For these purposes the Pathological Laboratory is well equipped with the necessary apparatus and material. Special subjects for research will be assigned to those who wish and are prepared to undertake original investigation.

Instruction in Clinical Microscopy is given in May and June to physicians in the Clinical Laboratory.

The Pathological Laboratory being upon the same grounds with the Johns Hopkins Hospital and Dispensary, the opportunities are convenient and readily accessible for combining clinical studies with the work in pathology.

Three associations, the Hospital Medical Society, the Historical Club, and the Journal Club, meet in the Assembly Room of the Hospital, one each Monday evening. The libraries of the University and the Hospital are supplied with a large collection of medical books and periodicals, which are accessible to the student.

The Johns Hopkins Hospital Bulletin, issued monthly,

and the Johns Hopkins Hospital Reports contain the proceedings of the Hospital societies, articles by the medical staff, and the results of researches conducted in the Hospital and the medical laboratories.

The Journal of Experimental Medicine, now in its second volume, under the editorial direction of Professor Welch, also contains reports of researches carried on in the physiological and pathological laboratories here and elsewhere.

Drawing.

The instruction in drawing is arranged to give the student a general knowledge of the subject, as far as the time at his command will permit, while those who have particular aptitude for drawing are encouraged to follow courses of special instruction.

Undergraduates take up drawing as one of their required studies, unless they can show a fair degree of proficiency attained elsewhere. Graduate and special students are allowed the privilege of receiving such instruction in drawing as may be most helpful to them in their respective fields of work. Those who look forward to scientific pursuits, especially those who study natural history, physics, applied mathematics and mechanics, and electrical engineering, find these courses of great value.

The subject, therefore, divides itself into three distinct lines of work, to meet the particular requirements of the different classes of students: (1) the course for undergraduates; (2) the courses of special instruction for graduate and other students; (3) the technical course for the students of electrical engineering.

The Undergraduate Course is designed to form part of the general education of the student. It aims to impart such knowledge of the principles of drawing, with extended practice in the application of the same, as shall best serve to educate the eye and to train the hand,—the one to see correctly and the other to express accurately the appearance of

forms. The course includes freehand and mechanical drawing. Special students in subjects preliminary to the electrical engineering course are required to take all this work; other students may have the option of freehand drawing alone throughout the year, and drawings made in the course in systematic botany may be accepted as an equivalent for the work of the last twelve weeks of the course in freehand drawing. In the freehand drawing, the student is at once set to draw from models, beginning with elementary forms, and proceeding through a series of exercises till he is able to produce a fair drawing of any simple object or group of objects, in outline and in light and shade. The chief instruments used are charcoal and crayon. The use of drawing instruments is taught, and the constructive processes are applied which are in general use in instrumental drawing. The elements of descriptive geometry are afterwards taken up in this course, and the fundamental principles of orthographic, scenographic, and isometric projections are worked out, and applied in carefully executed drawings, finished in ink. Precision and fidelity are insisted on and no careless work is allowed, nor is any copying permitted. Each student receives the personal attention and guidance of the instructor. With the exactness of pen-and-ink work on the one hand and the freedom of charcoal on the other, the student attains a power of graphic expression which will be of service to him in almost any pursuit.

The Special Instruction in drawing is necessarily of such a nature as is best adapted to the requirements of the individual student: freehand drawing from natural forms, in charcoal and in water color; from plaster casts, in charcoal and crayon; advanced work in descriptive geometry. This special instruction includes a course for students of Biology, with a view to illustrating the work of that course.

The Technical Course in mechanical drawing is especially planned to meet the requirements of the students of applied electricity. It consists of a carefully systematized series of exercises and problems to familiarize the student with the best modern methods of the draughting room, and the acqui-

sition of such skill in rapidly and accurately executing designs and drawings accordingly, as the time and the aptitude of the student permit.

The course extends over a period of two years. During the earlier months the time is occupied with a set of drawings to develop precision of measurement and acquaint the student with the standard conventionalities of the draughting room. Special instruction in the use of the various drawing instruments and appliances and their care is given during this time. Line drawing, tracing and blue-printing, the conventional colors, geometrical construction, projections, machine sketching and other important details of the draughtsman's work are then practised until the student has acquired proficiency. The advanced instruction, beginning with the middle of the first year, consists of the solution of problems in the kinematics of machinery on the drawing board, embracing many of the fundamental forms, and the constructions of linkage, cams, gear-trains, tooth outlines, etc., together with the tracing of the motions of detail mechanism and the kinematic relations of connected parts. This work is followed by the design of the details of special pieces of machinery, in whole or in part, to fulfil given conditions. The dimensions, detail drawings, tracings, and blue-prints are the result of the student's computations in the light of good current practice. This part of the work is accompanied by lecture-room instruction and the study of the text-book.

The concluding portion of the course embraces a similar method of teaching, the lecture-room and drawing-room work being so correlated that the student is continually in contact with his major subject. The course concludes with the designing of complete electric machines, dynamos, motors, or some important special type of machine. Students often make original designs, and not infrequently work out the details of their own inventions.

The instruction is of a personal nature, and the individual needs of each student are carefully watched and special aid given where required.

THE DEGREE OF DOCTOR OF PHILOSOPHY.

Regulations.

The degree of Doctor of Philosophy is here offered to students who have followed advanced courses of university study for a term of years, under suitable guidance and favorable conditions, and who have submitted an acceptable thesis and passed the prescribed examinations.

In order to be accepted by the Board of University Studies, as a candidate for the degree of Doctor of Philosophy, the student must give evidence that he has completed a liberal undergraduate course of academic study antecedent to the baccalaureate degree, such as is offered by colleges of good standing.

He must then follow advanced studies in the departments of knowledge which he may have chosen, and these studies must be pursued without serious distractions, under qualified teachers, for a period of at least three years. Private study, or study pursued at a distance from libraries and laboratories and other facilities, will not be considered as equivalent to university study.

The Board reserves the right to say in each case whether the antecedent training has been satisfactory, and, if any of the years of advanced work have been passed by the candidate away from this university, whether they may be rightly regarded as spent in university studies under suitable guidance and favorable conditions.

In order that students may receive the definite counsel of the proper authorities with respect to their future course, they are advised to offer themselves as "candidates" for this degree as soon as their purposes are formed. At least one academic year must be passed in this university, and in any case the year immediately preceding the final examinations.*

*In case a student has complied with all the conditions and has practically completed his preparation for the final examinations, and is prevented by good reason from presenting himself, he should ask the Board to appoint a later day for his examination.

No one will be admitted to the degree of Doctor of Philosophy unless the Board is satisfied that he can translate at sight ordinary French and German into English; and those who are looking forward to the degree are earnestly advised to acquire this knowledge as early as possible, so that they may be enabled to read and consult the French and German works to which they will be constantly referred.

Correspondence on the foregoing matters should be addressed to the Registrar of the University, who will refer the letter, if there be occasion, to the teacher to whose department it relates.

Preliminary Test.

A student who is looking forward to taking the degree of Ph. D., must give notice of his intention early in his course to the Board of University Studies. In this preliminary notice he must designate the principal subject to which he intends to devote himself. The Board will then name an adviser for the candidate, with whom he shall from time to time consult.

Acceptance of the Candidate.

A student wishing to be considered a candidate for the degree must make a formal application to the Board of University Studies to be so enrolled, at least an academic year* in advance of the time when he expects to present himself for examination in his principal subject. Blank forms are provided for the purpose. His application will be referred to the examiners in French and German for their certificates, and, when so certified, to a committee consisting of the Professors in the several departments concerned. The student must appear before the committee and answer such inquiries in respect to his previous studies and his proposed course as the committee may ask. The committee shall report to the Board:

a. Whether the diploma submitted is satisfactory.

b. In case deficiencies in his previous training appear,

*The acceptance of a candidate by the Board at its first meeting in October is regarded as an acceptance at the beginning of an academic year.

whether they are such as he should be required to make up, or whether the committee discourages the continuation of his studies with reference to a degree.

c. Whether the committee approves the combination of studies which the candidate proposes to offer at his final examination.

The committee shall not prepare its report until after a joint conference of all its members with the student. After receiving this report from the committee, the Board will vote upon the acceptance of the candidate, and, should he be accepted, will inform him of any conditions which may be imposed.

Combination of Studies.

Every candidate for the degree of Ph. D. will be expected to name in his application the principal subject and the two subordinate subjects, which he wishes to follow. The subordinate subjects are of two grades and are known respectively as the first or principal subordinate and the second subordinate.

Requirements in the Subordinate Subjects.

Each of the subordinate subjects shall be followed by the candidate during a portion of his working time for at least one year of the total time devoted to graduate work, but not more than one-third of the total working time of one year shall be required in the case of the second subordinate, nor more than one-third of the total working time of two years in the case of the first subordinate.

If either of the subjects selected as subordinates involves laboratory work, not more than one-third of the working time of one year shall be required in that subject, except at the request of the adviser, whether that subject is taken as a first or as a second subordinate.

Thesis.

a. The thesis must be written on a theme approved by the adviser of the candidate, and must be completed and submitted to the Board at least four weeks before the written

examinations are held, unless the adviser requests that, for reasons satisfactory to the Board, an exception be made. The thesis must be legibly written and paged and bound according to a prescribed form which can be seen in the Library.

b. The Board shall designate two members of the academic staff as referees, who shall present a written report on the thesis,—said report to be filed. In the intervals between the sessions of the Board, the President shall have power to appoint two referees.

c. The candidate shall print the thesis in full or in part,—if in part, to the extent of not less than twenty-four octavo pages,—under the supervision of his adviser, within one year of the time when the degree is conferred, and shall present one hundred and fifty copies of the work to the University. A biographical sketch of the author shall be appended to the thesis in both its manuscript and its printed form.

d. If the thesis has not already been printed, a deposit of $50, to insure its printing within the specified period, shall be made by the candidate at the treasurer's office before the degree is conferred. This deposit shall be returned to him when the printed copies are presented to the University.

Written Examinations.

a. The candidate shall not be admitted to the written examination in the principal subject until the thesis is accepted (in whole or in part).

b. Twelve hours shall be allowed for the written examinations,—six hours for the principal subject, and three hours for each of the two subordinate subjects. No session shall last for more than three hours.

c. The candidate shall be permitted to take the written examination in both the first and second subordinates at the end of the respective years in which the courses in these subjects are completed, or whenever he is ready, at the discretion of the examiner.

d. If the candidate passes satisfactory written examina-

tions during and at the end of the course in that subject which is taken by him as a second subordinate, he shall be absolved from further examination both written and oral in such subject.

e. Written reports on the result of the written examinations shall be laid before the Board and filed.

f. The questions and answers in the written examinations shall be laid before the Board at the oral examination of the candidate and the questions filed.

Oral Examinations.

The oral examinations shall be conducted by the Board. The time allotted to the examination shall be one hour, and three-fourths of this time shall be devoted to the principal subject.

Degree.

The names of the candidates found worthy of the degree will be submitted to the Board of Trustees, and with their approbation the degree will be publicly conferred.

COLLEGIATE INSTRUCTION.

GENERAL STATEMENTS.

The collegiate instruction of the University is intended to provide a thorough and systematic training in liberal studies. It is organized and administered with reference to the wants of two classes of persons,—first, those who look forward to an academic, professional, or literary career, and who desire such a discipline as shall best fit them for further study; and, second, those who do not intend to continue their studies beyond the period of the college course, and who wish to find in it a sufficient preparation for life. It is believed that the needs of both of these classes are met in the system which has been established; that a student who has passed through the regular collegiate training is prepared to undertake graduate studies or the work of the professional school, with special advantage, and that such a student, entering directly upon practical life, cannot fail to possess and to retain the aptitudes and sympathies of an educated man. The distinction between collegiate work, as relatively elementary, formal, and disciplinary, and the freer methods of more advanced instruction is definitely maintained, and it is felt that the effectiveness of the undergraduate teaching is increased, in no small degree, by the fact that it is given in connection with a developed system of higher courses, and in the presence of a large body of graduate scholars, who by their example quicken the younger students.

As an evidence that the collegiate course has been successfully completed, the degree of Bachelor of Arts is conferred at its close. The degree signifies, in the case of every recipient, such instruction in ancient and modern languages, in mathematics, in the physical and natural sciences, in literature, philosophy, and history, as is believed to be essential to a liberal education. Opportunity is given, however, to vary

the proportion of these studies, in accordance with individual tastes and needs, through the organization of several distinct and parallel courses of instruction, known as "groups." These are seven in number, each comprising (1) studies common to all the groups and required of all undergraduates, (2) studies peculiar to a group, (3) optional studies. The groups are assumed to be equally honorable and difficult, and are intended to combine liberty of election on the part of the student with sufficient exercise of authority to prevent discursive and ill-considered work. Each group contains two principal studies, both of which extend through two years of instruction. These are: (1) Latin and Greek, (2) Mathematics and Physics, (3) Chemistry and Biology, (4) Physics and Chemistry, (5) Latin and Mathematics, (6) History and Political Science, (7) English, with German or French.

After matriculation, the student is expected to follow one of these groups; but, as stated below, they may be to some extent modified, provided only that the amount of required study shall not be diminished, and that the education received shall be partly literary and partly scientific.

To matriculated students, the following courses are now open:

A.—Mathematics (I and II); Physics (I and II); Chemistry (I and II); Biology (I and II); Geology (I).

B.—Latin (I and II); Greek (I and II); French (I and II); German (I and II); Italian (I); Spanish (I); English (I and II); Rhetoric and English Composition (I); English Literature (I); History (I and II); Political Science (I and II); Logic, Psychology, and Ethics (I).

Practice is also required in Drawing, Vocal Culture, and Physical Culture.

In addition, a number of courses, most of which are of two hours a week, are offered. One of these must be chosen by each student in his third year. Among them are courses in Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, Italian, Spanish, English Literature, History of Philosophy (one hour), Comparative Philology (one hour).

* In most of the subjects, the student must absolve Course I before entering upon Course II.

In order to receive the degree of Bachelor of Arts, the candidate must, in addition to all the requirements for admission and matriculation, absolve—

(*a*) The following prescribed courses: Rhetoric; English Literature; Economics and History; Philosophy; the minor course* in French and the minor in German; exercises in English Composition, as prescribed by the Collegiate Professor of English; Drawing; Physical and Vocal Culture.

(*b*) Five courses, each occupying four hours weekly for one year, of which at least one must be a major course, and at least one must be a laboratory course†; also an elective course, two hours weekly, during the third year.

The student may follow strictly the group which he has chosen; or, under the regulations above stated, he may substitute, with the approval of his adviser, other studies for two —in certain cases, for three—of the courses laid down in his group.

Students who have passed French or German as the principal subject in place of Greek for matriculation, are required to substitute for it some other subject, or to take an advanced course in one of these languages. Any undergraduate course approved by the adviser may be chosen for this purpose.

In these ways the course of study in the several groups may be modified; while those who wish to concentrate their attention in the more thorough study of a special field, will find it advantageous to accept the groups as they stand.

The optional courses in Science and Literature vary from year to year, and may be followed by the student according to his tastes and acquisitions. The arrangements of the University allow those who have capacity for more than is prescribed, to broaden their studies by attendance upon the public lectures from time to time provided; and, if time permits, they may also take longer or shorter courses not actually required of them.

Candidates for the degree of Bachelor of Arts must pursue

* A "minor course" is the first year of instruction in any subject; a "major course" is the second year of instruction.

† If the major course selected be a laboratory course, an additional laboratory course will not be required.

the last year of their undergraduate course in this institution. Regular attendance upon the prescribed exercises is required, and the degree is conferred only when the records show that all examinations have been passed, and that the appointed amount of work has been satisfactorily completed.

ADVISERS.

Before an undergraduate student begins his academic work, the President will designate one of his principal instructors to act as his Adviser. It is expected that every Adviser will establish relations of friendliness and confidence with the students assigned to his care. No instructor will receive into a class any student who does not bring with him (in a book provided for that purpose) assurance that his Adviser approves his pursuing the study at that time; and no student is allowed, without the consent of his Adviser, to discontinue any work.

CHARACTERISTICS OF THE VARIOUS GROUPS OF STUDY.

Each group contains twelve courses. Eight of these are four-hour courses,—each representing four hours of class-work weekly for a year. Of the others, two—the course in Rhetoric and that in English Literature—are three-hour courses; one is an elective of two hours in the third year; and one—the course in Philosophy—occupies five hours weekly through one year. Rhetoric, English Literature, and Philosophy form a part of each group. A course in Economics and History is also included in each group. Each group contains at least one year of French and one year of German, and at least one year of attention to a scientific subject, including the performance of the work prescribed in the laboratory. The instruction in Drawing and in Vocal and Physical Culture is additional to these twelve courses.

1. *The Classical Group.*

The Classical group corresponds in the main to what has been the ordinary course of study in our colleges, the requisite

mathematics having been secured before matriculation. The emphasis is laid upon Latin and Greek, each of which is studied two years. Rhetoric, English Literature, French, German, one subject involving a year of laboratory work, Economics and History, Comparative Philology, Philosophy, and an elective subject occupying two hours weekly in the third year, are also included, together with Drawing and Vocal and Physical Culture.

2. *The Mathematical-Physical Group.*

The Mathematical-Physical group substitutes two years of Mathematics and two years of Physics for Latin and Greek, adding also a year of Chemistry, the other studies being the same as in the classical group. This course affords a good basis for the subsequent study of Electricity, Engineering, Astronomy, and other subjects largely dependent on the science of Mathematics.

3. *The Chemical-Biological or Preliminary Medical Group.*

The Chemical-Biological group fits the student to enter at once upon the studies of the Johns Hopkins Medical School, and is also a good preparation for the study of medicine elsewhere, or for the professional study of Natural History. It provides instruction in Physics, Chemistry, and Biology, with laboratory practice. The requirements in French, German, English, History, and Philosophy are the same as in the other groups.

4. *The Physical-Chemical Group.*

The Physical-Chemical group is intended to lead to scientific pursuits which are neither chiefly mathematical nor chiefly biological,—to provide an education in scientific studies for one who has not chosen his specialty. It is identical with the second group, except in the relative time allotted to Mathematics and Chemistry, the latter subject extending through two years and the former through one.

5. *The Latin-Mathematical Group.*

The Latin-Mathematical group affords a good fundamental training, without the study of Greek. It differs from the classical group, only in substituting Mathematics for Greek.

6. *The Historical-Political Group.*

The Historical-Political group furnishes a basis for the subsequent study of law. It omits Greek and retains but one year of Latin, providing two years of History and two years of Political Science.

7. *The Modern Language Group.*

The Modern Language group is designed for those who wish a literary training based upon the modern rather than upon the ancient languages. It substitutes for Greek two years of English, and, retaining one year of Latin, substitutes for the other an additional year of either French or German. If the student is already proficient in French or German, he may substitute a year of Spanish or Italian for one of these languages.

Matriculated students and candidates for matriculation must take up and complete the course in Drawing in their first year, unless the Board of Advisers, for special reasons, permit delay until the second year. Special students who have subsequently matriculated, must complete the course immediately after their matriculation.

ADMISSION TO COLLEGIATE COURSES.

Those who wish to pursue undergraduate courses, are expected to appear at the regular times appointed for examination in June and October. Persons at a distance desiring information are requested to write for a blank form of "Application for Admission," which may be filled up and returned to the University. Upon its receipt, such counsel will be given as the case requires.

Matriculated Students.

Students who fully meet at entrance the requirements for matriculation (as stated on pages 154–157), and who maintain a satisfactory standing in the full work of each year, may be graduated in three years.

The matriculation examination may be divided, and a part of the subjects passed in one year and the rest a year later, according to the regulations prescribed below (see page 157).

When a school, approved by the Academic Council, shall certify that a candidate has satisfactorily completed *all the studies requisite for matriculation*, such candidate will be exempted from examination except in the following subjects: Trigonometry, Analytic Geometry, Cicero or Vergil (as the candidate may prefer), Latin Prose Composition, Homer or Herodotus (as the candidate may prefer), Greek Prose Composition, the minor courses in French and German, English, and Science. The examination in these subjects may be divided between June and October of the same year, but, except in the case of English, not between successive years.

Candidates for Matriculation.

The matriculation examination may be passed at entrance by those who have completed the courses now offered in several preparatory schools of Baltimore. Persons taught elsewhere are often unable to obtain instruction in all the subjects requisite for matriculation. To meet the needs of such students, terms of admission are offered (as described on page 158), corresponding to the terms of admission to other colleges of established reputation. Students who satisfy these requirements may be admitted to the course of study stated on page 161. In the case of such persons, a residence of four years will be necessary to the attainment of the degree of Bachelor of Arts.

Special Students.

The University discourages from entering as special students those who are not qualified, by age, character, attainments, and habits of study, to attend its classes and lectures

with profit to themselves and credit to the institution. The authorities are, however, ready to receive, as special students, properly qualified persons who have some good reason for not pursuing the full course. A special examination is arranged for such persons (see page 158). Many excellent students have been thus enrolled, among whom not a few have subsequently changed their plans, passed the matriculation examination, and at length received the degree of Bachelor of Arts. The privilege once accorded will be forfeited at any time, if the student is found unworthy of it.

Requirements for Matriculation.

1. *Mathematics.*—Algebra; Plane and Solid Geometry; Plane Trigonometry; Analytic Geometry. A competent knowledge of Arithmetic (including the metric system) is assumed.

The requirements in Algebra include the following subjects:

(*A*). The fundamental rules, use of parentheses, factoring, greatest common divisor, least common multiple, equations of the first degree in one or more unknown quantities and problems leading to such equations, fractions, inequalities, involution and evolution, theory of exponents, radicals, imaginaries, quadratic equations and problems leading to quadratics.

(*B*). Equations solved like quadratics, simultaneous quadratic equations, theory of quadratic equations, ratio and proportion, the progressions, the binomial theorem, logarithms, permutations and combinations.

The subjects required in Plane and Solid Geometry and in Trigonometry are those treated in the ordinary text-books.

The subjects required in Analytic Geometry are the straight line in rectangular coördinates, transformation of coördinates, loci, and plotting of curves.

Substitution: Students selecting groups which do not include Minor Mathematics or Major Physics, may, in case they offer Greek for matriculation, substitute for Analytic Geometry the *elements* of French or of German (4*b* or 5*b*, page 155).

2. *Latin.*—Cæsar, *Gallic War*, books i-v; Vergil, *Eclogues*, and *Aeneid*, books i-vi; Ovid (Allen and Greenough's Ovid, pp. 1-74, 176-195, or Kelsey's); Cicero, the four orations against Catiline, *de imperio Pompeii*, *pro Archia*, and *in Verrem*, *actio I;* translation of easy English prose into Latin.

Substitution: Sallust's *Catiline* may be substituted for the fifth book of Cæsar, and Cicero's *de Senectute* for the *de imperio Pompeii*.

The examination will test the power of exact and idiomatic translation, the knowledge of forms, of syntax, and of prosody. In certain cases a candidate may be allowed to take an oral instead of a written examination. If, for instance, he has not been prepared on the books above prescribed, but has read about the same amount in other books, he may be examined on these.

3. *Greek.*—Xenophon, *Anabasis*, books i-iv; Homer, *Iliad*, books i-iv; Herodotus, book vii; translation of easy English prose into Greek.

Candidates will be expected to show an accurate knowledge of forms, and an acquaintance with the common rules of syntax and accent, and with the prosody of the Homeric poems.

In case any candidate has made his preparation by the study of books other than those named above, or for any reason believes that an oral examination would be for his advantage, he may be examined upon easy passages previously unseen; if he acquits himself well, he will be required to put on paper only the passage given to be translated into Greek prose.

4, 5. *German and French.*—Candidates not offering Greek must offer one of the following combinations. In one of these languages the elements are required; in the other, an amount of knowledge equal to that represented by the minor or first year's collegiate course:

4.	5.
(*a*) *German.*	(*a*) *French.*
Otis's *Elementary German.*	Whitney's *Grammar, Parts I* and *II*, substituting for the exercises of *Part II* "*Materials for French Composition, Part I*, based on Halévy's *L'Abbé Constantin*," (ed. Grandgent; Heath & Co.).
Buchheim's *German Reader, Part I*, and 71 pp. of *Part II.* (Clarendon Press).	
Schiller, *Wilhelm Tell* (Clarendon Press, large edition).	Super's *French Reader, Parts II, III, IV;* De Vigny, *La Canne de Jonc* (ed. Spiers); Mérimée, *Colomba;* Daudet, *Contes* (ed. Cameron).
Goethe, *Egmont* (ed. Buchheim).	
Lessing, *Minna von Barnhelm* (Clarendon Press).	Molière, *L'Avare;* Hugo, *Hernani* (ed. Matzke); Augier, *Le Gendre de M. Poirier;* Sandeau, *Mlle. de la Seiglière* (ed. Warren).
Heine, *Harzreise* (Clarendon Press).	
Freytag, *Aus dem Staate Friedrichs des Grossen* (ed. Hager).	
Prose Composition (Whitney's *Grammar*, Exercises, 2d Series).	
(*b*) *French.*	(*b*) *German.*
Whitney's *Grammar, Part I.*	Otis's *Elementary German.*
Super's *French Reader, Parts II, III, IV;* De Vigny, *La Canne de Jonc* (ed. Spiers).	Buchheim's *German Reader, Part I*, pp. 3-68.
	Meissner's *German Conversation*, pp. 1-54.

The amount of German and French accepted as a substitute for Greek at matriculation may not count also as a part of the work required for graduation.

Reading at Sight. The language papers, both ancient and modern, will contain one passage, or more, of moderate difficulty, not included in the prescribed lists. A good handling of passages previously unseen will go far toward compensating for deficiencies in the formal requirements. This does not apply, however, to the examination in the *elements* of French and German.

6. *English.*—The examination will consist of two parts:

I. *Reading.* The candidate will be required to write a paragraph or two on each of several topics chosen by him from a considerable number—perhaps ten or fifteen—set before him in the examination paper. This part of the examination is designed, primarily, to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. As additional evidence of preparation, the candidate may present an exercise book, properly certified by his instructor, containing compositions or other written work.

The books set for this part of the examination will be:—

In 1897: Shakespeare's *As You Like It;* Irving's *Tales of a Traveller;* Hawthorne's *Twice Told Tales;* Longfellow's *Evangeline;* George Eliot's *Silas Marner.*

In 1898: Milton's *Paradise Lost,* Books I and II; Pope's *Iliad,* Books I and XXII; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *Ancient Mariner;* Carlyle's *Essay on Burns;* Lowell's *Vision of Sir Launfal;* Hawthorne's *The House of the Seven Gables.*

In 1899: Dryden's *Palamon and Arcite;* Pope's *Iliad,* Books I, VI, XXII, XXIV; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *Ancient Mariner;* De Quincey's *The Flight of a Tartar Tribe;* Cooper's *The Last of the Mohicans;* Lowell's *Vision of Sir Launfal;* Hawthorne's *The House of the Seven Gables.*

In 1900: Dryden's *Palamon and Arcite;* Pope's *Iliad,* Books I, VI, XXII, XXIV; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* De Quincey's *The Flight of a Tartar Tribe;* Cooper's *The Last of the Mohicans;* Tennyson's *The Princess;* Lowell's *Vision of Sir Launfal.*

II. *Study and Practice.* This part of the examination presupposes the careful study of each of the works named below. The examination will be upon subject-matter, form, and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy.

The books set for this part of the examination will be:—

In 1897: Shakespeare's *The Merchant of Venice;* Burke's *Speech on Conciliation with America;* Scott's *Marmion;* Macaulay's *Life of Samuel Johnson.*

In 1898: Shakespeare's *Macbeth;* Burke's *Speech on Conciliation with America;* De Quincey's *The Flight of a Tartar Tribe;* Tennyson's *The Princess.*

In 1899: Shakespeare's *Macbeth;* Milton's *Paradise Lost,* Books I and II; Burke's *Speech on Conciliation with America;* Carlyle's *Essay on Burns.*

In 1900: Shakespeare's *Macbeth;* Milton's *Paradise Lost,* Books I and II; Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

The reading and study of the works named above is recommended to all candidates; equivalents will, however, be accepted, provided that the amount of reading be about equally divided between prose and verse.

In connection with the reading and study of the required books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be memorized. The essentials of English grammar should not be neglected in preparatory study.

Note.—No candidate will be accepted in English whose work is notably defective in point of spelling, punctuation, idiom, or division into paragraphs.

While candidates will be permitted to take the entire examination at entrance, it is strongly recommended that Part I be taken as a preliminary examination, and Part II as a final examination. Candidates will thus have an opportunity to make up deficiencies which may be discovered at the preliminary examination, and to enter the University without a condition in English.

7. *History.*—The outlines of the History of England and the United States, or of the History of Greece and Rome, and the outlines of Geography.

Gardiner's English History for Schools and Johnston's History of the United States for Schools are recommended as sufficient for candidates in modern history; Oman's Greece and Allen's Rome, for candidates in classical history.

8. *Science.*—The elements of Chemistry, Botany, or Physical Geography.

The examination is intended to determine whether the candidate has a knowledge of the elementary facts of one of these sciences, based on practical study. Those who take the examination in Chemistry will be examined in Remsen's "Elements of Chemistry," and will be required to have performed the experiments described in Remsen's "Laboratory Manual," and to present their laboratory note-books for examination. The requirements in Botany will be a knowledge of the structure of plants, such as may be obtained from a study of Spaulding's "Introduction to Botany," excluding the microscopic work, and the ability to use Gray's Manual in determining the species of flowering plants. The examination will be mainly practical. In order to absolve the requirements in Physical Geography, the student must pass an examination on Hinman's "Eclectic Physical Geography."

Division of the Matriculation Examination.

A student may pass a part of the matriculation examination one year before his admission to the University, and receive credit for the same under the following conditions:

In his application he must distinctly declare his intention to divide the examination. The subjects thus passed will not count towards matriculation, unless the candidate completes his matriculation the following year. The first part of the divided examination will be confined to the following subjects, of which the candidate will be expected to pass in English (part I), Algebra, one Latin author, and three of the remaining subjects*:

English (part I).
Algebra (A). (See page 154).
Plane Geometry.
Cæsar, *Gallic War*, books i-v.
Vergil, *Aeneid*, books i-vi.
Xenophon, or French, or German. (See statement below).
History of the United States or of Greece.
History of England or of Rome.
Science.

* Schools approved by the Academic Council, according to the plan described on page 153, may recommend for examination in English (part I) and in Science, candidates who do not wish to attempt the other subjects required in the first part of the divided examination.

If French or German is offered in place of Xenophon, the candidate will be examined as follows:

In *German:* Otis's *Elementary German;* Buchheim's *German Reader, Part I,* and 71 pages of *Part II;* Schiller's *Wilhelm Tell;* Prose Composition, sentences of moderate difficulty to be translated into German at sight.

Or in *French:* Whitney's *Grammar, Part I,* with the exercises; Super's *French Reader, Parts II, III, IV;* Mérimée, Sandeau, De Vigny, Augier, Daudet—(as on page 155); Prose Composition, sentences of moderate difficulty to be translated into French at sight.

The whole of the above amounts must be offered.

Requirements for Admission as a Candidate for Matriculation.

1. *Mathematics.*—Algebra (A and B); Plane Geometry (as for matriculation). A competent knowledge of Arithmetic (including the metric system) is assumed.
2. *Latin.*—Cæsar, *Gallic War,* books i-iv; Vergil, *Aeneid,* books i-vi; Cicero, four orations against Catiline, *de imperio Pompeii, pro Archia;* Ovid, 1,000 lines (Allen and Greenough's Ovid, pp. 1-33, 176-180, or Kelsey's); translation of easy English prose into Latin.
3. *Greek.*—Xenophon, *Anabasis,* books i-iv; Homer, *Iliad,* books i-iii; translation of easy English sentences into Greek.
4. *German and French* (in substitution for *Greek*):
   German.—Otis's *Elementary German;* Buchheim's *German Reader, Part I,* pp. 3-68; Meissner's *German Conversation,* pp. 1-54.
   French.—Whitney's *Grammar, Part I;* Super's *French Reader, Parts II, III, IV;* De Vigny, *La Canne de Jonc* (ed. Spiers).
5. *English,*—(as for matriculation).

6 and 7. *History* and *Science,*—(as for matriculation).

Requirements for Admission as a Special Student.

Before an undergraduate is admitted as a special student, in studies other than those preliminary to Applied Electricity, he will be required, unless expressly excused for definite reasons, to pass examinations in the following subjects:

1. *Mathematics.*—Algebra; Plane and Solid Geometry. (As for matriculation). A competent knowledge of Arithmetic (including the metric system) is assumed.

2. *Latin.*—Cæsar, *Gallic War*, books i-iv; Cicero, six orations; Vergil, *Aeneid*, books i-vi, and *Eclogues*.
3. *Greek.*—Xenophon, *Anabasis*, books i-iv; Homer, *Iliad*, books i, ii.

Substitution: Students who do not offer Greek, will be examined in French or German as specified under "Division of the Matriculation Examination" (page 158), and in the History of Greece and Rome. Oman's Greece and Allen's Rome are recommended.

4. *English,*—(as for matriculation).
5. *United States History,*—(as for matriculation).
6. *Science,*—(as for matriculation).

An undergraduate applying for admission as a special student in subjects preliminary to the course in Applied Electricity (page 120), will be required to pass in the subjects specified below. He will not be permitted to divide the entrance examination between successive years.

1. *Mathematics.*—Algebra; Plane and Solid Geometry; Plane Trigonometry; Analytic Geometry. (As for matriculation). A competent knowledge of Arithmetic (including the metric system) is assumed.
2. *French* or *German,*—(as specified under "Division of the Matriculation Examination," page 158).
3. *English,*—(as for matriculation).
4. *United States History,*—(as for matriculation).
5. *Science,*—(as for matriculation).

After admission, and before entering upon the course in Applied Electricity, the student must complete the minor and major courses in mathematics and physics, the minor course in chemistry, the course in rhetoric and English composition, and the course in free-hand and instrumental drawing.

A certificate of proficiency is given to those students who complete the course in Applied Electricity, and who possess a reading knowledge of *both* French and German.

EXAMINATIONS AND REPORTS.

Each instructor files in the office, about the time of the winter and spring recesses and at the close of the year, a report of the progress of each member of his classes, deduced from daily observation, or examinations, or both. These

reports are called the Intermediate Records. Other reports (*e. g.* of private readings, or of the completion of a particular book or subject) may be made by the instructor at any time.

At the close of the year, the University holds an examination of each class on the whole year's work, known as the University Examination, the report of which, certified by the University Examiner and the Instructor, is also put on file in the office.

From the Intermediate Records and the Reports of the University Examination, the Board of Collegiate Advisers causes to be made up an average mark, on the authorized scale, for the work of the whole year of each student in each minor or major subject, which alone determines the standing of any candidate for honors. This constitutes the Final Record.

The reports of all these examinations are carefully recorded and preserved, and the degree of Bachelor of Arts is conferred when the records show that the prescribed amount of work has been satisfactorily completed.

Whatever course has been followed, satisfactory certificates must be presented from the teachers of drawing, physical training, and vocal culture. One or more of the essays which the candidate has written, copied by his own hand in a prescribed style, must be left with the Registrar before the first of May preceding graduation, for presentation to the Board of Collegiate Advisers. In all cases the candidate must pursue the last year of his undergraduate course in this institution, and must have completed his matriculation before entering upon that year, unless, for special reasons, the Board of Advisers shall have permitted a postponement of some portion of the matriculation requirements. Such special reasons must, in all ordinary cases, be submitted to the Board not later than the close of the year preceding the last; and in no case will they be considered later than October of the last year.

SCHEDULES OF COLLEGE COURSES.

Course of Study prescribed for Candidates for Matriculation.

This course extends through an academic year.

1. Mathematics. *Four hours weekly.*
   Algebra (special topics).
   Solid Geometry.
   Plane Trigonometry.
   Analytic Geometry (straight line and loci).

2. Latin. *Three hours weekly.*
   Cicero, *De Senectute.*
   Sallust, *Catiline.*
   Ovid, *Amores* and *Tristia.*
   Vergil, *Georgics* (selections).
   Sight Reading and Prose Composition.

3. Greek. *Three hours weekly.*
   Homer, *Iliad*, book vi.
   Herodotus, book vii.
   Sight Reading and Prose Composition.

4. German or French.
   (*a*) For students offering Greek. *Three hours weekly.*
   German: Thomas's *Practical German Grammar;* Meissner's *German Conversation;* Buchheim's *German Reader, Part I;* E. S. Buchheim's *Short German Plays* (Clarendon Press).
   French: Grandgent's *Short Grammar*, and *Exercises* based on Super's *French Reader;* Super's *French Reader;* Hugo, *La Chute;* De Vigny, *Le Cachet Rouge.*
   After completing one of these courses, students are required to take minor A in their groups.
   (*b*) For students not offering Greek. *Four hours weekly.* The minor course, Class A.

5. Rhetoric and English Composition. *Three hours weekly.*
   Principles of Rhetoric.
   Rhetorical Analysis.
   Practice in Writing.
   Students taking Greek may defer this course until after matriculation.

6. Freehand and Mechanical Drawing.

After matriculation, one of the Groups described in the following pages will be selected.

Groups offered to Matriculated Students.

First Group. (*Classical.*)

First Year.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book i).
Quintus Curtius (book iii).
Horace, *Ars Poetica.*
Phædrus (selections).

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

GREEK.

CLASS WORK. (1 p. m.) *Four hours weekly.*

Andocides, *De Mysteriis.*
Homer, *Iliad* (three books).
Euripides (one play).
Prose Composition.

PRIVATE READING:

Lysias (two orations).
Plutarch, *Themistocles.*

LABORATORY COURSE. *Four hours class-work weekly.*

Chemistry* (9 a.m.), *or* Physics (10 a. m.), *or* Biology (10 a. m.), } Lectures, recitations, and laboratory work.

Second Year.

LATIN.

CLASS WORK. (10 a. m.) *Four hours weekly.*

Juvenal.
Pliny.
Terence (one play).
Plautus (one play).
Prose Composition.

PRIVATE READING:

Tacitus, *Germania* and *Agricola.*
Lucan (book i).
Plautus, *Miles Gloriosus.*

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

GREEK.

CLASS WORK. (12 m.) *Four hours weekly.*

Plato, *Phædo.*
Selections from the elegiac, melic, and iambic poets.
Sophocles (one play).
Reading at sight.
Prose Composition.

PRIVATE READING:

Æschylus (one play).
Aristophanes (one play).

GERMAN. (11 a. m.) *Four hours weekly.*

Otis's *Elementary German.*
Whitney's *Grammar.*
Brandt's *German Reader.*
Von Moser, *Der Bibliothekar.*
Goethe, *Egmont.*
Prose Composition.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Mediæval History. } *Two hours.*
Modern Europe.
Elements of Economics. } *Two hours.*
Applied Economics.

ELECTIVE COURSE.† *Two hours weekly.*

FRENCH. (12 m.) *Four hours weekly.*

Whitney's *Brief Grammar.* Exercises in Grammar and Composition. Grandgent's *Exercises* based on Super's *French Reader.*
Super's *French Reader*; Dumas, *L'Evasion du Duc de Beaufort*; Mérimée, *Colomba*; Augier, *Le Gendre de M. Poirier.*

COMPARATIVE PHILOLOGY.

One hour weekly.

*If Chemistry be chosen, it should be taken in the second year, and German in the first year.

† For 1897-98, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Second Group. (*Mathematical-Physical.*)

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart*; Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl*; Seidel, *Novellen.*
- History of Modern German Literature.
- Composition.
- Sight Reading.
- Private Reading: Gutzkow, *Zopf und Schwert.*

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- General Chemistry.
- Laboratory Work. (*Five hours weekly.*)

MATHEMATICS. (1 p. m.) *Four hours weekly.*
- Plane Analytic Geometry.
- Differential and Integral Calculus.

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

Second Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
- Elementary Mechanics.
- Heat.
- Electricity and Magnetism.
- Sound.
- Light.
- Laboratory Work. (*Three hours weekly.*)

MATHEMATICS. (9 a. m.) *Four hours weekly.*
- Determinants.
- Differential and Integral Calculus (special topics).
- Theory of Equations.
- Modern Analytic Geometry of Two Dimensions.
- Analytic Geometry of Three Dimensions.

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes*; Mérimée, *Colomba*; Hugo, *Hernani*; Molière, *Le Bourgeois Gentilhomme*; Augier, *Le Gendre de M. Poirier*; Labiche, *La Cagnotte*; Sandeau, *Mlle. de la Seiglière.*
- Short Outline of French Literature (XVII-XIX Centuries).
- Prose Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
- Mediæval History. } *Two hours.*
- Modern Europe. }
- Elements of Economics. } *Two hours.*
- Applied Economics. }

PHYSICS. (12 m.) *Four hours class-work weekly.*
- Mechanics.
- Elementary Thermodynamics.
- Elementary Theory of Electricity and Magnetism.
- Wave Theory of Light.
- Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.* *Two hours weekly.*

*For 1897-98, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Third Group. (*Chemical-Biological.*)

First Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
- Elementary Mechanics.
- Heat.
- Electricity and Magnetism.
- Sound.
- Light.
- Laboratory Work. (*Three hours weekly.*)

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- General Chemistry.
- Laboratory Work. (*Five hours weekly.*)

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* Seidel, *Novellen.*
- History of Modern German Literature.
- Composition.
- Sight Reading.
- Private Reading: Gutzkow, *Zopf und Schwert.*

Second Year.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- Analytical Chemistry and Chemistry of the Metals.
- Chemistry of Carbon Compounds.
- Laboratory Work. (*Five hours weekly.*)

BIOLOGY.* (10 a. m.) *Four hours class-work weekly.*
- General Biology: Comparative study of selected animals and plants; study of the human skeleton; elements of embryology and of botany.
- Laboratory Work. (*Five hours weekly.*)

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *Le Bourgeois Gentilhomme;* Augier, *Le Gendre de M. Poirier;* Labiche, *La Cagnotte;* Sandeau, *Mlle. de la Seiglière.*
- Short Outline of French Literature (XVII-XIX Centuries).
- Prose Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

Third Year.

BIOLOGY. (9 a. m.) *Four hours class-work weekly.*
- Elements of Zoölogy.
- Animal Physiology and Histology.
- Embryology.
- Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.† *Two hours weekly.*

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
- Mediæval History. } *Two hours.*
- Modern Europe. }
- Elements of Economics. } *Two hours.*
- Applied Economics. }

*Students who propose to enter the Medical School, may postpone this course until the last year, taking History and Economics in the second year, and substituting another course for Biology of the third year.

† For 1897-98, elective courses are offered in the following subjects: Differential Equations, Astronomy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Fourth Group. (*Physical-Chemical.*)

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* Seidel, *Novellen.*
- History of Modern GermanLiterature.
- Composition.
- Sight Reading.
- Private Reading: Gutzkow, *Zopf und Schwert.*

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- General Chemistry.
- Laboratory Work. (*Five hours weekly.*)

MATHEMATICS. (1 p. m.) *Four hours weekly.*
- Plane Analytic Geometry.
- Differential and Integral Calculus.

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

Second Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
- Elementary Mechanics.
- Heat.
- Electricity and Magnetism.
- Sound.
- Light.
- Laboratory Work. (*Three hours weekly.*)

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- Analytical Chemistry and Chemistry of the Metals.
- Chemistry of Carbon Compounds.
- Laboratory Work. (*Five hours weekly.*)

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *Le Bourgeois Gentilhomme;* Augier, *Le Gendre de M. Poirier;* Labiche, *La Cagnotte;* Sandeau, *Mlle. de la Seiglière.*
- Short Outline of French Literature (XVII-XIX Centuries).
- Prose Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
- Mediæval History. } *Two hours.*
- Modern Europe. }
- Elements of Economics. } *Two hours.*
- Applied Economics. }

PHYSICS. (12 m.) *Four hours class-work weekly.*
- Mechanics.
- Elementary Thermodynamics.
- Elementary Theory of Electricity and Magnetism.
- Wave Theory of Light.
- Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.* *Two hours weekly.*

*For 1897-98, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Fifth Group. (*Latin-Mathematical.*)

First Year.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book I).
Quintus Curtius (book iii).
Horace, *Ars Poetica.*
Phædrus (selections).

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Schiller, *Maria Stuart*; Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl*; Seidel, *Novellen.*
History of Modern German Literature.
Composition.
Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

LABORATORY COURSE. *Four hours classwork weekly.*

Chemistry* (9 a. m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.)
} Lectures, recitations, and laboratory work.

Second Year.

LATIN.

CLASS WORK. (10 a. m.) *Four hours weekly.*

Juvenal.
Pliny.
Terence (one play).
Plautus (one play).
Reading at Sight.
Prose Composition.

PRIVATE READING:

Tacitus, *Germania* and *Agricola.*
Lucan (book I).

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

FRENCH. (12 m.) *Four hours weekly.*

Daudet, *Contes*; Mérimée, *Colomba*; Hugo, *Hernani*; Molière, *Le Bourgeois Gentilhomme*; Augier, *Le Gendre de M. Poirier*; Labiche, *La Cagnotte*; Sandeau, *Mlle. de la Seiglière.*
Short Outline of French Literature (XVII-XIX Centuries).
Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
Private Reading.

MATHEMATICS. (1 p. m.) *Four hours weekly.*

Plane Analytic Geometry.
Differential and Integral Calculus.

Third Year.

MATHEMATICS. (9 a. m.) *Four hours weekly.*

Determinants.
Differential and Integral Calculus (special topics).
Theory of Equations.
Modern Analytic Geometry of Two Dimensions.
Analytic Geometry of Three Dimensions.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Mediæval History. } *Two hours.*
Modern Europe. }
Elements of Economics. } *Two hours.*
Applied Economics. }

ELECTIVE COURSE.† *Two hours weekly.*

* If Chemistry be chosen, it should be taken in the third year, and the courses in Mathematics in the first and second years.

† For 1897-98, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Sixth Group. (*Historical-Political.*)

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart*; Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl*; Seidel, *Novellen.*
- History of Modern German Literature.
- Composition.
- Sight Reading.
- Private Reading: Gutzkow, *Zopf und Schwert.*

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

ANCIENT HISTORY. (10 a. m.) *Four hours weekly.*
- Greece.
- Rome.
- Readings from Classical Historians.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*
- Livy (two books).
- Horace (selections).
- History of Roman Literature.
- Sight Reading.

PRIVATE READING:
- Cæsar, *Bellum Civile* (book i).
- Quintus Curtius (book iii).
- Horace, *Ars Poetica.*
- Phædrus (selections).

Second Year.

HISTORY. (11 a. m.) *Four hours weekly.*
- Civilization. Church History. Renaissance. } *Two hours.*
- Reformation. France and Germany. Revolution. } *Two hours.*

ECONOMICS. (10 a. m.) *Four hours weekly.*
- Elements of Economics. Money; Taxation. } *Two hours.*
- History of Economic Thought. Tariff; Transportation. } *Two hours.*

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes*; Mérimée, *Colomba*; Hugo, *Hernani*; Molière, *Le Bourgeois Gentilhomme*; Augier, *La Gendre de M. Poirier*; Labiche, *La Cagnotte*; Sandeau, *Mlle. de la Seiglière.*
- Short Outline of French Literature (XVII–XIX Centuries).
- Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

Third Year.

POLITICS. (12 m.) *Four hours weekly.*
- English Constitutional Law and History.
- American Constitutional Law and History.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

LABORATORY COURSE. *Four hours class-work weekly.*
- Chemistry (9 a. m.), *or* Physics (10 a. m.), *or* Biology (10 a. m.). } Lectures, recitations and laboratory work.

ELECTIVE COURSE.* *Two hours weekly.*

*For 1897–98, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

Seventh Group. (*Modern Languages.*)

First Year.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book i).
Quintus Curtius (book iii).
Horace, *Ars Poetica.*
Phædrus (selections).

ENGLISH. (1 p. m.) *Four hours weekly.*

Early English Texts.
English Literature.

LABORATORY COURSE. *Four hours class-work weekly.*

Chemistry* (9 a.m.), *or* Physics (10 a. m.), *or* Biology (10 a. m.). } Lectures, recitations and laboratory work.

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

Second Year.

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* Seidel, *Novellen.*
History of Modern German Literature.
Composition.
Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Mediæval History. } *Two hours.*
Modern Europe. }
Elements of Economics. } *Two hours.*
Applied Economics. }

FRENCH. (12 m.) *Four hours weekly.*

Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *La Bourgeois Gentilhomme;* Augier, *Le Gendre de M. Poirier;* Labiche, *La Cagnotte;* Sandeau, *Mlle. de la Seiglière.*
Short Outline of French Literature (XVII–XIX Centuries).
Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports; Private Reading.

ELECTIVE COURSE.† *Three hours weekly.*

Third Year.

A.

FRENCH. (10 a. m.) *Four hours weekly.*

Romantic Movement, especially Hugo and Musset.
Classical Drama, especially Molière.
History of French Literature.
Laws of Versification.
Composition and Idioms.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports; Private Reading.

or C.

ITALIAN *or* SPANISH. (9 a. m.) *Four hours weekly.*

ELECTIVE COURSE.† *Two hours weekly.*

or B.

GERMAN. (10 a. m.) *Four hours weekly.*

Classics: Goethe, *Faust;* Lessing, *Nathan der Weise.*
Prose Reading.
History of German Literature.
Composition.
Sight Reading; Private Reading.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

ENGLISH. (12 m.) *Four hours weekly.*

Anglo-Saxon.
Early Scottish Poets.
Elizabethan Literature.
Literature of early 19th Century.

* If Chemistry be chosen, it should be taken in the second year, and German in the first year.

† For 1897–98, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course; Geology may be taken in place of French.

SYNOPSIS OF GROUPS.

Group I.	Group II.	Group III.	Group IV.	Group V.	Group VI.	Group VII.
FIRST YEAR.						
Latin, 9–10. Chemistry, 9–10.* or Biology or Physics, 10–11. Rhetoric, 12–1. Greek, 1–2.	Chemistry, 9–10. German, 11–12. Rhetoric, 12–1. Mathematics, 1–2.	Chemistry, 9–10. Physics, 10–11. German, 11–12. Rhetoric, 12–1.	Chemistry, 9–10. German, 11–12. Rhetoric, 12–1. Mathematics, 1–2.	Latin, 9–10. Chemistry, 9–10.* or Biology or Physics, 10–11. German, 11–12. Rhetoric, 12–1.	Latin, 9–10. History, 10–11. German, 11–12. Rhetoric, 12–1.	Latin, 9–10. Chemistry, 9–10.* or Biology or Physics, 10–11. Rhetoric, 12–1. English, 1–2.
SECOND YEAR.						
Latin, 10–11. German, 11–12. Greek, 12–1. English Literature.	Mathematics, 9–10. Physics, 10–11. French, 12–1. English Literature.	Chemistry, 9–10. Biology, 10–11. French, 12–1. English Literature.	Chemistry, 9–10. Physics, 10–11. French, 12–1. English Literature.	Latin, 10–11. French, 12–1. Mathematics, 1–2. English Literature.	Political Science, 10–11. History, 11–12. French, 12–1. English Literature.	History and Economics, 10–11. German, 11–12. French, 12–1. Elective Course.
THIRD YEAR.						
History and Economics, 10–11. Philosophy, 11–12. French, 12–1. Comp. Philology. Elective Course.	History and Economics, 10–11. Philosophy, 11–12. Physics, 12–1. Elective Course.	Biology, 9–10. History and Economics, 10–11. Philosophy, 11–12. Elective Course.	History and Economics, 10–11. Philosophy, 11–12. Physics, 12–1. Elective Course.	Mathematics, 9–10. History and Economics, 10–11. Philosophy, 11–12. Elective Course.	Chemistry, 9–10. or Physics or Biology, 10–11. Philosophy, 11–12. Political Science, 12–1. Elective Course.	French or German, 10–11. or Italian or Spanish, 9–10. Philosophy, 11–12. English, 12–1. Elective Course.

* See footnotes on pages 162, 166, 168.

A minor course in Geology is offered at 12 m., and may be taken instead of French by those who have passed that subject at matriculation in place of Greek, and, in certain cases, by other persons (see page 149).

HOURS OF COLLEGE COURSES.

HOURS.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.
9	English Literature. Mathematics (Prelim.).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Italian. Spanish. French (Elements). German (Elements).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Italian. Spanish. French (Elements). German (Elements).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Italian. Spanish.	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Italian. Spanish. French (Elements). German (Elements).
10	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). German (Major). French (Major). Political Science (Minor).	English Literature. Mathematics (Prelim.).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). German (Major). French (Major). Political Science (Minor). Greek (Preliminary).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). German (Major). French (Major). Political Science (Minor). Greek (Preliminary).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). German (Major). French (Major). Political Science (Minor). Greek (Preliminary).
11	German (Minor). Philosophy. History (Major). Latin (Preliminary).	German (Minor). Philosophy. History (Major).	Philosophy. English Literature. Mathematics (Prelim.).	German (Minor). Philosophy. History (Major). Latin (Preliminary).	German (Minor). Philosophy. History (Major). Latin (Preliminary).
12	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology.	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology.	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology.	Elective Courses. Mathematics (Prelim.). Geology.	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major).
1	Greek (Minor). Mathematics (Minor). English (Minor).	Greek (Minor). Mathematics (Minor). English (Minor).	Greek (Minor). Mathematics (Minor). English (Minor).	Greek (Minor). Mathematics (Minor). English (Minor).	Elective Courses.

THE JOHNS HOPKINS MEDICAL SCHOOL.

TERMS OF ADMISSION.

The Medical Department of this university is planned for the professional education of those students who have been especially fitted to receive its instructions by a course of preliminary training in the liberal arts, and especially in those branches of science, like physics, chemistry, and biology, which underlie the medical sciences. Men and women are admitted upon the same terms.

As candidates for the degree of Doctor of Medicine the school receives:

1. Those who have satisfactorily completed the Chemical-Biological course which leads to the A. B. degree in this university.

2. Graduates of approved colleges or scientific schools who can furnish evidence: (*a*) That they have acquaintance with Latin and a good reading knowledge of French and German; (*b*) That they have such knowledge of physics, chemistry, and biology as is imparted by the regular minor courses given in these subjects in this university.

The phrase "a minor course," as here employed, means a course that requires a year for its completion. In physics, four class-room exercises and three hours a week in the laboratory are required; in chemistry and biology four class-room exercises and five hours a week in the laboratory, in each subject.

Many inquiries have been received regarding the character and amount of the requisite training indicated by the term "Minor Course" in these sciences. In explanation, it may be stated, with respect to Biology, that the candidate should have followed

for at least a year a laboratory course in the structure, life history, and vital activities of selected types of animal and vegetable life. In the Chemical-Biological course for undergraduates in this university, the laboratory work in biology at present includes the study of such types as amœba, hæmatococcus, yeast, penicillium, bacteria, mushroom, hydra, vorticella, a fern, a flowering plant, the earthworm, lobster, anodon; the gross and minute anatomy of the frog, the development of its eggs, the structure, formation, and metamorphoses of the tadpole; the study and drawing of the bones of the human skeleton; the comparison of some parts of related vertebrate skeletons; dissection of a mammal; the field and laboratory study of some few flowering plants. The laboratory work is the more important part, the lectures and other exercises subsidiary. It is, of course, not to be understood that this curriculum of biological work must be rigidly followed. Equivalent work will be accepted.

The candidate should have followed a course in general Chemistry for at least a year. This course should include laboratory work, about five hours a week through the year, and lectures and class-room work covering the outlines of inorganic chemistry and the elements of organic chemistry. A good knowledge of the subject as presented in Remsen's "Introduction to the Study of Chemistry" may be regarded as the minimum requirement. A fuller knowledge of Chemistry is, of course, desirable.

In Physics, the candidate should have followed a collegiate course for at least one year. This should include four hours a week of class-room work and at least three hours a week of quantitative work in the laboratory. Special attention should be given to theoretical mechanics and to the mechanical and electrical experiments.

3. Those who give evidence by examination that they possess the general education implied by a degree in arts or in science from an approved college or scientific school, and the knowledge of French, German, Latin, physics, chemistry, and biology above indicated.

Applicants for admission will receive blanks to be filled out relating to their previous courses of study.

They are required to furnish certificates from officers of the colleges or scientific schools where they have studied as to the courses pursued in physics, chemistry, and biology.

If such certificates are satisfactory, no examination in these subjects will be required.

Candidates who have not received diplomas of the required character will be examined for admission at the beginning of the session.

No one will be admitted to advanced standing without furnishing evidence that these terms of admission as regards preliminary training have been fulfilled, and that courses equivalent in kind and amount to those given here, preceding that year of the course for admission to which application is made, have been satisfactorily completed.

Hearers, not candidates for a degree, will be received at the discretion of the Faculty.

GENERAL PLAN OF INSTRUCTION.

The course of instruction is planned for those who have received a liberal education and the training in physics, chemistry, and general biology which has been specified. The required period of study for the degree of Doctor of Medicine is four years. The academic year begins on the first of October and ends about the middle of June. There are short recesses at Christmas and Easter.

The first two years of the course are devoted mainly to the fundamental medical sciences, a large part of the time being spent in practical work in the laboratories. In the latter two years medicine, surgery, obstetrics, and the various specialties are studied in the clinical laboratories, the dispensary, and the wards of the hospital.

The principal studies of the first year are anatomy, including normal histology, microscopic anatomy, embryology, physiology, and physiological chemistry. The study of anatomy and of physiology is continued in the second year. Throughout the second year general pathology, pathological anatomy, and pharmacology are studied. A practical course in bacteriology, with the chief emphasis upon its hygienic

and pathological bearings, is given during three months of this year.

Upon the basis of thorough training in the medical sciences, pursued during the first two years of the course, the student should now be well fitted to undertake the study of practical medicine and surgery.

During the third year the general principles of medicine, surgery, and obstetrics are studied, and clinical instruction in medicine and surgery is given. The study of certain special branches of medicine is also begun. Leading features of the work of this year are the courses in the clinical laboratories and practical work in the dispensary.

During the fourth year the practical study of medicine, surgery, and obstetrics is continued, and instruction is given in gynecology and the various special branches of medicine and surgery, viz.: dermatology, diseases of the nervous system, genito-urinary diseases, laryngology, ophthalmology and otology, paediatrics, and psychiatry. In this year the students serve as clinical clerks and surgical dressers in the wards of the hospital and are in daily attendance at special classes in the dispensary. They will also attend cases of labor in the obstetrical wards of the hospital, and, under proper supervision, in the homes of patients. For the ward and dispensary work the class is divided into small groups.

Instruction in hygiene, legal medicine, and medical history is provided during the course.

Work in the dissecting room, in the laboratory, and at the bed-side, demonstrations, clinics, lectures, and recitations are the main features of the methods of instruction. Simply didactic lectures occupy a subsidiary position, as compared with instruction by recitations and demonstrations and especially by practical work in the various laboratories, in the hospital wards, and in the dispensary. In consequence of the high standard of admission, the classes are not likely to be excessively large, and abundant opportunity is therefore afforded for practical work for each student and for personal contact between teacher and student.

SPECIAL COURSES FOR GRADUATES IN MEDICINE.

Special courses of instruction for graduates in medicine are given during the months of May and June. These courses are in Pathology, Bacteriology, Clinical Microscopy, Medicine (including Diseases of Children and of the Nervous System), Surgery, Gynecology, Dermatology, Laryngology, and Ophthalmology and Otology. The instruction is intended to meet the requirements of practitioners of medicine, and is almost wholly of a practical character. It includes laboratory courses, demonstrations, bed-side teaching, and clinics in the wards, dispensary, amphitheatre, and operating rooms of the hospital.

Detailed statements as to the courses of instruction and other information are given in the Annual Announcement of the Johns Hopkins Medical School.

FELLOWSHIPS.

I. Fellowships by Courtesy.

The Academic Council may, at their discretion, by special vote, enroll as Fellows by Courtesy

(*a*) Gentlemen who are or who have been teachers in colleges and other like institutions, and who wish, for brief periods, to avail themselves of the opportunities here afforded for study and for the use of books and laboratories.

(*b*) Holders of fellowships in other colleges, during their residence here.

(*c*) Those who have been fellows of this University and desire to continue in residence.

Fellows by Courtesy will not be exempt from the payment of fees, except by a special vote.

II. Fellowships.

Twenty fellowships, each yielding five hundred dollars but not exempting the holder from the charges for tuition, are annually awarded in this University.

The system of fellowships was instituted for the purpose of affording to young men of talent from any place an opportunity of continuing their studies in the Johns Hopkins University while looking forward to positions as professors, teachers, and investigators, or to other literary and scientific vocations. The fellowships are given to young men who wish to follow systematically through the year the instruction of the teachers here engaged, and those who are appointed are expected to proceed to the degree of Doctor of Philosophy. The appointments are not made as rewards for good work already done, but as aids and incentives to good work in the future; in other words, the fellowships are not so much honors and prizes bestowed for past achievements,

as helps to further progress and stepping-stones to honorable intellectual careers. They are not offered to those who are definitely looking forward to the practice of any one of the three learned professions (though such persons are not formally excluded from the competition), but are bestowed almost exclusively on young men desirous of becoming teachers of science and literature, or proposing to devote their lives to special branches of learning which lie outside of the ordinary studies of the lawyer, the physician, and the minister. Appointments are rarely if ever made of graduates of more than five years' standing.

Each candidate is expected to submit his college diploma or other certificate of proficiency from the institution where he has been taught, with recommendations from those who are qualified to speak of his character and attainments. But this is only introductory. He must also submit, orally or in writing, such evidence of his past success in study and of his plans for the future, together with such examples of his literary or scientific work, as will enable the professors to judge of his fitness for the post. The examination is, indeed, in a certain sense competitive; but not with uniform tests, nor by formal questions submitted to the candidates. First, the head of a given department considers, with such counsel as he may command, the applicant's record. The professors then collectively deliberate on the nominations made by individual members of their body. The list upon which they agree, with the reasons for it, is finally submitted by the President of the University to the Executive Committee, and by them to the Trustees for final registration and appointment. By all these precautions the highest results which were anticipated have been secured. A company of most promising students has been brought together, and their ability as teachers and scholars has been recognized by the calls they have received to permanent and desirable posts in various parts of the country.

The number of applications for fellowships has hitherto been very large, and it may have happened that some can-

didates have failed of appointment who were really superior to those selected. But if so, this has resulted from the fact that a considerable number of applicants have each year forwarded to the University merely testimonials from their instructors, without any such examples of their own work as has been mentioned above; and, in consequence, the professors, from want of adequate knowledge, have possibly passed over candidates who may have been in the highest degree meritorious.

The applicants are notified of the result by means of a printed list of the successful candidates.

The absence of candidates from Baltimore has been no bar to their appointment, in cases where adequate evidence of their claims has been presented; but it is obvious, from the nature of the case, that graduate students residing in Baltimore must have better opportunities than others of making known their powers to the appointing board, and during the last few years the number of persons appointed, who had not previously been resident here, is very small.

Regulations.

1. The application must be made prior to May 1, in writing, addressed to the President of the University, and he will refer the papers to the Academic Council, by whom the nominations will be made to the Board of Trustees, at their meeting in June. There is no prescribed form of application.

2. The candidate must give evidence of a liberal education, such as the diploma of a college of good repute; of decided proclivity towards a special line of study, such as an example of some scientific or literary work already performed; and of upright character, such as a testimonial from some instructor.

3. The value of each fellowship is five hundred dollars. The holder is not exempt from the charges for tuition. In case of resignation, promotion, or removal from the fellowship, payments will be made for the time during which the office shall have been actually held.

4. Every holder of a fellowship will be expected to perform such duties as may be allotted to him in connection with his course of study, to act when called upon as an examiner or as moderator in the examination-room, to give all his influence for the promotion of scholarship and good order, and in general to co-operate in upholding the efficiency of the University, as circumstances may suggest. He must reside in Baltimore during the academic year.

5. He will be expected to devote his time to the prosecution of special studies (not professional), under the direction of the head of the department to which he belongs, and before the close of the year to give evidence of progress by the preparation of a thesis, the completion of a research, the delivery of a lecture, or by some other method.

6. He may give instruction, with the approval of the President, by lectures or otherwise, to persons connected with the University, but he may not engage in teaching elsewhere.

7. He may be reappointed at the end of the year, but only for exceptional reasons.

8. Usually not more than two fellows will be appointed in any department of study.

9. As these fellowships are awarded as honors, those who are disposed, for the benefit of others, or for any other reason, to waive the pecuniary emolument, may do so, and still have their names retained on the honor list.

III. Adam T. Bruce Fellowship.

This fellowship was founded by the mother of Adam T. Bruce, Ph. D., late Fellow and Instructor in this University, as a memorial of her son, and is awarded annually. It is bestowed by the appointing board upon the candidate whom they consider most likely to promote biological science, and especially animal morphology, by original research. The stipend will be the income of the Adam T. Bruce Fellowship endowment of ten thousand dollars. Preference is given to

those who have already held fellowships in the Johns Hopkins University.

The electors consist of the President of the University, the chief instructor in animal morphology, the chief instructor in animal physiology, and a non-resident member annually chosen by the resident electors. The non-resident elector for the year 1896-97 was Professor Maynard M. Metcalf, Ph. D., of the Woman's College of Baltimore.

Appointments Already Made.

1888. Henry V. Wilson, Ph. D.
1889. Shozaburo Watase, Ph. D.
1890. Thomas H. Morgan, Ph. D.
1891. Robert P. Bigelow, Ph. D.
1892. Robert P. Bigelow, Ph. D.
1893. Maynard M. Metcalf, Ph. D.
1894. Ross G. Harrison, Ph. D.
1894. Seitaro Goto, M. S.
1895. Henry McElderry Knower, Ph. D.
1895. George Lefevre, Ph. D.
1896. George Lefevre, Ph. D.

Regulations.

Candidates for the Bruce Fellowship must make application, in writing, to the President of the Johns Hopkins University before the first of May of the year of their candidature. They must forward to the President, at the same time, such evidence of their qualifications for appointment as they desire to be considered by the electors.

The electors may require any candidate to appear before them in person.

The Bruce Fellow shall devote his time to study and research in Biology at a place approved of by the President of the University, and he shall, during the month of February in the year of his tenure of the fellowship, send to the President a written statement of the scientific work accomplished by him since his appointment.

The tenure of the fellowship shall commence on the first of September in the year of appointment.

Two hundred and fifty dollars shall be paid to the Fellow on October 1, and the remainder at convenient intervals during his tenure of the fellowship.

The holder of the Bruce Fellowship shall not be more than thirty years of age at the date of his election.

The Bruce Fellow may be re-elected, but not oftener than twice.

The holder of the fellowship shall be exempt from charges for tuition.

The electors shall have the power to declare the fellowship vacant, if its holder prove, in their opinion, unworthy; and no further stipend shall be paid to such person.

SCHOLARSHIPS.

I. University Scholarships.

[Regulations adopted by the Board of University Studies, May 6, 1891; now republished, subject to an expected revision.]

For the encouragement of scholarship among those who have taken the baccalaureate degree and wish to continue their studies here, twenty university scholarships are awarded.

1. Ten of these scholarships are awarded in June, by the Board of Collegiate Advisers, to those young men who have completed their undergraduate course during the current session in this University and who stand first in point of scholarship.

2. The remaining ten, and any of the others made vacant by resignation or otherwise, are open about the first of January to graduates of this or of other institutions who have been studying here during the previous part of the session. Those who wish to be candidates must address their applications to the President of the University, who will appoint a committee of five to consider the applications, and, with the aid of such evidence as may be obtained, to make nominations from among the applicants to the Board of University Studies.

3. The emolument of these scholarships, which are tenable for one year, will be the equivalent of two hundred dollars, part of which will be applied to the payment of tuition fees, while the rest will be paid in money.

4. These scholarships are to be awarded as honors, and those who are disposed, for the benefit of others or for any

other reason, to waive the pecuniary emolument, or who are desirous of studying elsewhere, may do so and still have their names retained on the honor list. Those who receive the emolument will be expected to pursue their studies exclusively in this University.

5. The Board will reserve appointments, if worthy candidates do not offer.

6. Students who receive honorable mention, without appointment to scholarships, are not entitled to the remission of tuition fees.

II. Hopkins Scholarships.

In the will of the founder of the University, his Trustees are requested to "establish, from time to time, such number of free scholarships in said University as may be judicious, and to distribute the said scholarships among such candidates from the States of Maryland, Virginia, and North Carolina, as may be most deserving of choice, because of their character and intellectual promise, and to educate the young men so chosen free of charge."

Forty-five such scholarships will be bestowed for the next academic year,—upon fifteen students from each of the three States named. These scholarships will be of two grades—the ordinary scholarship, entitling the holder to free tuition, and the honorary scholarship, entitling him to free tuition and a stipend of seventy-five dollars.

Students can be recognized as candidates only when actual residents of the State, from which they desire to be appointed, during at least the year next preceding their enrolment in the Universtiy. If the appointing board is not sure as to the legal residence of any candidate, the point in question shall be determined by the Executive Committee of the Board of Trustees.

These scholarships are all bestowed for merit, and are tenable for the year subsequent to the appointment, the holders being re-eligible.

Successful candidates who are disposed, for the benefit of

others or for any other reason, to waive the pecuniary emolument, may do so, and still have their names retained on the honor list. The scholarships may be forfeited because of frequent or prolonged absence, defective scholarship, or unworthy conduct.

Scholarships made vacant by resignation, by forfeiture, or by the non-appearance of worthy candidates at the regular times of selection, may be bestowed by the appointing board, at their discretion, upon other candidates who are found worthy, provided that the principles of this foundation are not departed from. In case the holder of a scholarship gives it up for any reason during the course of a session, such part of the stipend will be paid to him as seems equitable to the Executive Committee of the Board of Trustees.

Holders of scholarships are not exempt from laboratory fees.

Scholars from Maryland.

These scholars are appointed by the Board of Collegiate Advisers, and no one will receive the honor whose standing as a whole is lower than "*good.*"

1. Five of the ordinary scholarships are open to those who have just completed their matriculation examination, and who stand best in a subsequent special examination in mathematics, Latin, and Greek (or French and German).

2. Three of the honorary and two of the ordinary scholarships are awarded to those matriculated students whose records in the studies of the first year are most creditable. By "studies of the first year" is meant either the studies laid down for the first year in one of the regular groups, or such other studies, covering fifteen hours of class-room work weekly (exclusive of work done to satisfy matriculation conditions), as may be approved of by the Adviser.

3. Scholarships are awarded for excellence in the studies of the second year upon the same terms as in the case of the first year; provided that the candidate shall have absolved the "studies of the first year" as above defined.

Scholars from North Carolina and Virginia.

Experience has led the authorities to believe that the Hopkins Scholarships allotted to North Carolina and Virginia will be more useful if offered to graduate students, rather than to undergraduates. Accordingly, these honors are now awarded like the Fellowships by the Academic Council. Fifteen are open to students from Virginia and fifteen to students from North Carolina who have already received a creditable baccalaureate degree or its equivalent. For each State there are nine ordinary and six honorary scholarships. In case the entire number of scholarships are not required for graduate students, those that remain may be awarded to undergraduates in the order of their merit. Applications in writing should be filed at the President's office, prior to June 1.

III. Washington Scholarships.

The Trustees offer two scholarships, yielding free tuition, to residents of the District of Columbia. These, like the Hopkins Scholarships, are awarded to undergraduate students for merit, do not carry exemption from laboratory fees, and are tenable for one year, the holders being eligible for re-appointment.

IV. Woodyear Scholarships.

These scholarships were founded in 1893 by Mrs. William E. Woodyear, of Baltimore, as a memorial of her husband. They are five in number—of the value of one hundred dollars each,—and are awarded annually for exceptional merit among those who need pecuniary assistance. They are offered primarily to undergraduates.

CHARGES FOR TUITION, LABORATORY EXPENSES, ETC.

A.

FOR ALL COURSES EXCEPT THE MEDICAL.

I. *Tuition Fees.*

The charge for tuition is one hundred and fifty dollars per annum, payable at the Treasurer's office in semi-annual instalments, October 1 and February 1. There is no extra charge for instruction in any department of study, for lectures, or for the use of the library, reading-room, and gymnasium. Fees are charged, as below stated, for material consumed in the laboratories, for registration, and for diplomas.

No deduction is made at the Treasurer's office because of absence for a period of less than half a year, or because a student gives only a part of his time to study, or because he belongs to but one class.

II. *Registration Fee and Caution Money.*

Every student (including Fellows, Fellows by Courtesy, workers in the laboratories, and attendants upon lectures) pays a registration fee of five dollars and deposits ten dollars as caution money at the time of his enrolment. The caution money is repaid to the student when he leaves the University, if there are no charges against him.

III. *Fees for Attendants on Single Courses.*

Students engaged in other pursuits—clergymen, lawyers, teachers, and other such persons—*who are not candidates for a degree,* are allowed to follow certain courses, not exceeding five lectures weekly, on the payment at one time of fifty dollars per annum. They are not regarded as members of the University, but are enrolled as "attendants upon lectures," and are entitled only to such privileges as they have paid for. Persons who desire to be so enrolled, are required to make a special written application to the Registrar.

IV. *Graduation Fees.*

The graduation fees are as follows, payable before the delivery of diplomas or certificates:

Doctor of Philosophy, ...	$10.00
Proficient in Applied Electricity, . .	10.00
Bachelor of Arts, ...	5.00

V. *Laboratory Charges.*

In Chemistry: For undergraduates and for graduates who take Chemistry as a subordinate subject, twenty-four dollars a year; for graduates and special students following Chemistry as their principal subject, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In Physics: For students who work one afternoon a week, twelve dollars a year; for those who work two afternoons a week, twenty-four dollars a year; for those who take Physics as their principal subject and for second-year students in applied electricity, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In Biology: For students who work one afternoon a week, twelve dollars a year; for undergraduates and for graduates who take Zoölogy or Physiology as a subordinate subject, twenty-four dollars a year; for graduates and special students following a biological science as their principal subject, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In all the laboratories, a charge is made for breakage and for apparatus not returned in good condition.

Exception to these charges can be made only at the written request of the Director of a laboratory, approved by the President of the University.

Fellows by Courtesy and others who have the privileges of guests in the various laboratories, are expected to pay the usual laboratory charges.

Doctors of Philosophy of this University who desire to remain for a time in the University after having received

their diplomas, may do so without charge for tuition, but they are required to pay the usual laboratory charges.

B.

I. Candidates for the Degree of M. D.

The charge for tuition is two hundred dollars per annum, payable at the Treasurer's office in semi-annual instalments, October 1 and February 1. There are no extra charges for instruction in any department or for laboratory courses, except for materials consumed.

A deposit of ten dollars as caution money is required from each student at the time of his enrolment. The caution money is repaid to the student when he leaves, if there are no charges against him. Special charges are made for breakage and for damage to apparatus.

II. Graduates attending Special Courses in Medicine.

Graduates of medical colleges may be admitted to all the courses in Medicine (not including Clinical Microscopy), Surgery, Gynecology, and special departments of Practical Medicine and Surgery for the sum of $100, and to single courses on the payment of the fees named below:—

Medicine (not including Clinical Microscopy),	$25
Surgery,	25
Gynecology,	25
Special Departments of Practical Medicine and Surgery,	25
Clinical Microscopy,	25
Pathological Histology (including post-mortem examinations and pathological demonstrations),	25
Bacteriology,	25
Advanced and special work,	25

In the Pathological and Clinical Laboratories special charges are made for breakage and for damage to apparatus. A deposit of ten dollars as caution money is required, which is returned when the student leaves if there are no charges against him.

Before entering upon any course of instruction in the Medical School, the student must obtain from the Dean of the Medical School, or his representative, a card certifying that he is qualified to follow the desired course. This card must be presented at the Treasurer's office of the University, where the fees must be paid before permission is granted to attend.

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